

M6 TSU

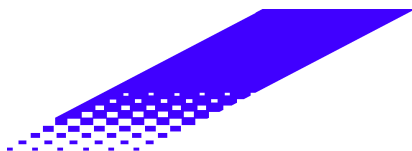
ENGINEERING VALIDATION TEST REPORT

COVER SHEET

CHANGE CONTROL

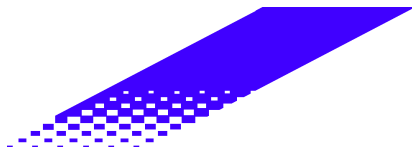
Description of Change	Revision	Sections/Pages Affected	Date
Initial Release	0.90		2001/7/17
	1.0		2001/8/28

Project: M6 TSU Intel 815 EP For Socket 370 ATX Motherboard
Date: 2001/9/11
Owner: Biostar Group
Contact: TEL: 886-2-2218-0150 FAX: 886-2-2218-1552
Home Page: <http://www.biostar.com.tw>

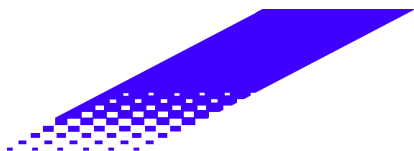


CONTENTS

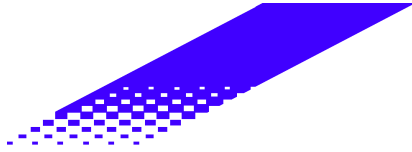
PRODUCT INFORMATION	5
Motherboard General Information	5
Chipset Details	5
BIOS Details	5
CPU Supports	5
Memory Supports	5
On-board Features and Devices	5
Mechanical	6
DESIGN REVIEW	8
Mainboard Voltage Measurement	8
Bus Clock	8
REQUIRED BIOS DEFAULT SETTINGS	10
BIOS FEATURES SETUP	10
CHIPSET FEATURES SETUP	10
POWER MANAGEMENT SETUP	10
PnP / PCI CONFIGURATION	11
INTEGRATED PERIPHERALS	11
PC Health Statues	12
FUNCTIONALITY	13
Setup Installation Test Of Operating System	13
Basic On-board Function Test	13
MS-DOS Operating	13
Windows ME Operating	16
Windows2000 Operating	25
Windows 98 SE Operating	29
Windows XP (Home Edition) Operating	31
Windows XP (Professional) Operating	32
Linux (Red Hat 7.1) Operating	33
RAID Function Test (Optional)	35
RAID Function Test Of BIOS	35
Create RAID 0 (Striping For Performance)	35
Create RAID 1 (Mirror For Security)	35
Create Span (JBOD)	36
Create RAID 0+1 (Striping + Mirror)	36
RAID Administrator Test For The Windows	37
Mirror	37
Span	37
Stripe	37
RELIABILITY TEST	39
Motherboard General Information	39
Burn-in Step	39
OVER CLOCK TEST	40
Windows Me (FSB:133 MHz)	41



PERFORMANCE TEST	42
Windows ME.....	42
Windows2000.....	44
RAID Performance Windows ME	45
RAID Performance Windows 2000	46
HARDWARE COMPATIBILITY LIST	47
CPU	47
CD-ROM.....	47
Camera Device	48
DVD-ROM.....	48
Display Card.....	49
FDD.....	50
HDD	50
Joystick.....	51
Keyboard	51
LAN Card.....	52
LAN HUB	52
Memory	52
Modem Card.....	53
Mouse	54
Monitor.....	54
Power Supply	55
Printer	55
Scanner	56
SCSI Card.....	56
Sound Card.....	56
USB HUB.....	57
ZIP/LS120	57
SOFTWARE COMPATIBILITY LIST	58
DOS.....	58
Windows.....	58
Server	58
VCORE WAVEFORM MEASUREMENT-Ver0.90	59
CPU_1.70v setup.....	59
Vcore Static Waveform.....	60
Vcore Transient Waveform.....	60
VCORE WAVEFORM MEASUREMENT-Ver1.0	64
CPU_1.65v setup.....	64
Vcore Static Waveform.....	65
Vcore Transient Waveform.....	65
CPU_1.70v setup.....	69
Vcore Static Waveform.....	70
Vcore Transient Waveform.....	70
THERMAL IMAGE TEST – Ver 1.0	74

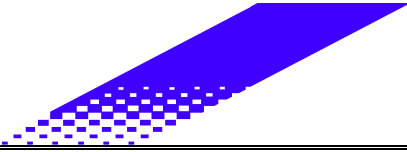


Motherboard General Information	74
FOUR CORNER TEST-Ver0.9	75
Test Equipment & Environment	75
V_{CORE} OCP & OVP TEST	75
FOUR CORNER TEST-Ver1.0	76
Test Equipment & Environment	76
V_{CORE} OCP & OVP TEST	76

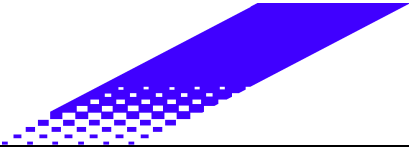


PRODUCT INFORMATION

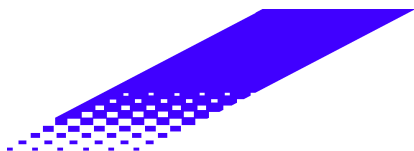
Motherboard General Information				
Vendor	Biostar			
Model Number	M6 TSU			
Version Number	V0.90/V1.0			
Platform	<input type="checkbox"/> AT <input checked="" type="checkbox"/> ATX <input type="checkbox"/> Micro ATX <input type="checkbox"/> Flex ATX			
FCC Logo	Ok			
CE Logo	Ok			
Chipset Details				
System Chipset Vendor	Intel			
North Bridge Revision	FW82815EP			
South Bridge Revision	FW82801BA			
Super I/O Chip Vendor	Winbond			
Super I/O Revision Number	W83627HF-AW			
Clock Generator Vendor	Realtek			
Clock Generator Revision	RTM560-50R/RTM560-25R			
Audio Chipset Vendor	Realtek			
Audio Chipset Revision	ALC201A			
BIOS Details				
BIOS Vendor	<input type="checkbox"/> AMI <input checked="" type="checkbox"/> Award <input type="checkbox"/> Phoenix <input type="checkbox"/> Others			
BIOS Revision Number	TSU0911X			
BIOS Memory Size	<input type="checkbox"/> 1M <input checked="" type="checkbox"/> 2M <input type="checkbox"/> 4M			
Flash EPROM BIOS	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No			
CPU Supports				
Type	CPU	CPU Frequency	Front Side Bus	Comments:
Socket 370	Intel Pentium III	Max = 1200 MHz	Max =133 MHz	
Socket 370	Intel Celeron	Max =1100 MHz	Max =100 MHz	
Memory Supports				
Maximum Memory Support	SDRAM_512_(MB)			
Number of Memory Slots	<input checked="" type="checkbox"/> DIMM X3			
Type of Memory Supported	<input type="checkbox"/> VCM <input checked="" type="checkbox"/> SDRAM <input type="checkbox"/> RDRAM <input type="checkbox"/> DDR RAM			
ECC Support	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A			
On-board Features and Devices				
No of PCI Full Length Slots	<input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input checked="" type="checkbox"/> 6			
No of ISA Full Length Slots	<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input checked="" type="checkbox"/> None			
AMR Slot Support	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No			
CNR Slot Support	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No			
ACR Slot Support	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No			
Number of Shared Slots	<input checked="" type="checkbox"/> 1 <input type="checkbox"/> None			
66/100/133 MHz Front Side Bus Supports	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No			
PCI v2.2 Compliance	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No			



ATAPI Compliance	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
Ultra DMA 33 Support	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
Ultra DMA 66 Support	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
ATA-100 Support	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
USB Connector Support	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
AGP (2X/4X) Slot Support	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
Support AGP SideBand Addressing Mode	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
Power on by LAN Support	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
Infrared Support	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
Enhanced Parallel Port	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
DMI Compliance	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
Hardware Monitor Support	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
ACPI v1.0/APM v1.2 Compliance	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
On-board Graphics Controller	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
On-board Network Adapter	<input type="checkbox"/> 1Mb <input type="checkbox"/> 10Mb <input type="checkbox"/> 100Mb <input checked="" type="checkbox"/> No	
On-board Audio Device	<input type="checkbox"/> Hardware <input checked="" type="checkbox"/> AC97 CODEC <input type="checkbox"/> No	
Mechanical		
Board Dimensions	Length <u>30.5</u> cm Width <u>20</u> cm	
Visual Inspection of Soldering	<input checked="" type="checkbox"/> Excellent <input type="checkbox"/> Fair <input type="checkbox"/> Poor	
Visual Inspection of Layout	Placement	Connectors Quality
Screw Holes Line Up with Case	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> Excellent <input type="checkbox"/> Fair <input type="checkbox"/> Poor
Power Connector placement in PCB	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> Excellent <input type="checkbox"/> Fair <input type="checkbox"/> Poor
DIMM Socket placement in PCB	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> Excellent <input type="checkbox"/> Fair <input type="checkbox"/> Poor
CPU Socket placement in PCB	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> Excellent <input type="checkbox"/> Fair <input type="checkbox"/> Poor
FAN Connector placement in PCB	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> Excellent <input type="checkbox"/> Fair <input type="checkbox"/> Poor
FDD Connector placement in PCB	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> Excellent <input type="checkbox"/> Fair <input type="checkbox"/> Poor
IDE Connector placement in PCB	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> Excellent <input type="checkbox"/> Fair <input type="checkbox"/> Poor
Front Panel Connectors in PCB	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> None	<input checked="" type="checkbox"/> Excellent <input type="checkbox"/> Fair <input type="checkbox"/> Poor
PS/2 Connectors Line Up in Case	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> None	<input checked="" type="checkbox"/> Excellent <input type="checkbox"/> Fair <input type="checkbox"/> Poor
USB Port Connectors Line Up in Case	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> None	<input checked="" type="checkbox"/> Excellent <input type="checkbox"/> Fair <input type="checkbox"/> Poor
COM Port Connectors Line Up in Case	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> None	<input checked="" type="checkbox"/> Excellent <input type="checkbox"/> Fair <input type="checkbox"/> Poor
Printer Port Connectors Line Up in Case	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> None	<input checked="" type="checkbox"/> Excellent <input type="checkbox"/> Fair <input type="checkbox"/> Poor
VGA Port Connectors Line Up in Case	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> None	<input type="checkbox"/> Excellent <input type="checkbox"/> Fair <input type="checkbox"/> Poor
Audio Port Connectors Line Up in Case	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> None	<input checked="" type="checkbox"/> Excellent <input type="checkbox"/> Fair <input type="checkbox"/> Poor
Game Port Connectors Line Up in Case	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> None	<input checked="" type="checkbox"/> Excellent <input type="checkbox"/> Fair <input type="checkbox"/> Poor
AGP Slot(Card) Line Up in Case	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> None	<input checked="" type="checkbox"/> Excellent <input type="checkbox"/> Fair <input type="checkbox"/> Poor
ISA Slots(Card) Line Up in Case	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> None	<input type="checkbox"/> Excellent <input type="checkbox"/> Fair <input type="checkbox"/> Poor
PCI Slots(Card) Line Up in Case	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> None	<input checked="" type="checkbox"/> Excellent <input type="checkbox"/> Fair <input type="checkbox"/> Poor
AMR Slot(Card) Line Up in Case	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> None	<input type="checkbox"/> Excellent <input type="checkbox"/> Fair <input type="checkbox"/> Poor
CNR Slot(Card) Line Up in Case	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> None	<input checked="" type="checkbox"/> Excellent <input type="checkbox"/> Fair <input type="checkbox"/> Poor
ACR Slot(Card) Line Up in Case	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> None	<input type="checkbox"/> Excellent <input type="checkbox"/> Fair <input type="checkbox"/> Poor
Daughter Card Slot in PCB	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> None	<input type="checkbox"/> Excellent <input type="checkbox"/> Fair <input type="checkbox"/> Poor
Wake-on LAN connector in PCB	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> None	<input checked="" type="checkbox"/> Excellent <input type="checkbox"/> Fair <input type="checkbox"/> Poor

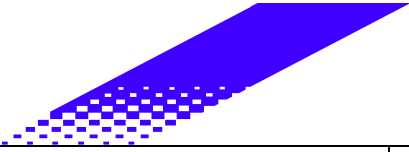


Wake-on Modem connector in PCB	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> None	<input type="checkbox"/> Excellent <input type="checkbox"/> Fair <input type="checkbox"/> Poor
CD Audio-in Connector in PCB	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> None	<input checked="" type="checkbox"/> Excellent <input type="checkbox"/> Fair <input type="checkbox"/> Poor
AUX Audio-in Connector in PCB	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> None	<input type="checkbox"/> Excellent <input type="checkbox"/> Fair <input type="checkbox"/> Poor
Telephony Connector in PCB	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> None	<input checked="" type="checkbox"/> Excellent <input type="checkbox"/> Fair <input type="checkbox"/> Poor
Digital Video Connector	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> None	<input type="checkbox"/> Excellent <input type="checkbox"/> Fair <input type="checkbox"/> Poor
Other Jumper in PCB	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> None	<input checked="" type="checkbox"/> Excellent <input type="checkbox"/> Fair <input type="checkbox"/> Poor
Comments:		

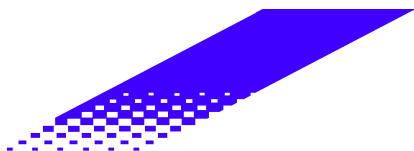


DESIGN REVIEW

Mainboard Voltage Measurement				
Voltage List		Voltage SPEC	Voltage Measured	Result
Battery Voltage		3.0V	3.08	Pass
Battery Current		7uA	4.1uA	Pass
+5V		5.0V+-5%	5.17	Pass
+12V		12.0V+-5%	11.89	Pass
-5V		-5.0V+-5%	-5.05	Pass
-12V		-12.0V+-10%	-12.05	Pass
+3.3V		+3.3V+-5%	3.39	Pass
Bus Clock				
Clock Frequency		Spec Value (MHz)	Measured Value	Pass/Fail
CPU and Clock Host		66.67	66.66	Pass
		100.00	100.00	Pass
		133.33	132.84	Pass
SDRAM Clock		100.00	100.00	Pass
		133.33	134.16	Pass
PCI Clock		33	33.23	Pass
AGP Clock		66.67	66.58	Pass
USB Clock		48	48.24	Pass
Reference Clock		14.31818	14.32	Pass
Clock Voltage Level		Spec Value (v)	Measured Value	Pass/Fail
CPU and Host Clock Voltage Level		2.5v	2.40	Pass
SDRAM Clock Voltage Level		3.3v	3.44	Pass
PCI Clock Voltage Level		3.3v	3.35	Pass
AGP Clock Voltage Level		3.3v	4.59	Pass
Reference Clock Voltage Level		2.5v	2.55	Pass
Clock Timing		Spec Value (v)	Measured Value	Pass/Fail
CPU Clock High Time	66.67	Min 4.94ns	6.54	Pass
	100.00	Min 2.5ns	4.14	Pass
	133.33	Min 1.4ns	2.76	Pass
CPU Clock Low Time	66.67	Min 4.94ns	6.61	Pass
	100.00	Min 2.4ns	4.07	Pass
	133.33	Min 1.4ns	2.69	Pass
CPU Clock Rising Time	66.67	0.34ns~1.36ns	1.05	Pass
	100.00	0.4ns~1.6ns	0.91	Pass
	133.33	0.4ns~1.6ns	1.09	Pass
CPU Clock Falling Time	66.67	0.34ns~1.36ns	0.98	Pass
	100.00	0.4ns~1.6ns	0.87	Pass
	133.33	0.4ns~1.6ns	1.01	Pass
PCI Clock High Time		Min.11ns	13.72	Pass
PCI Clock Low Time		Min.11ns	12.81	Pass

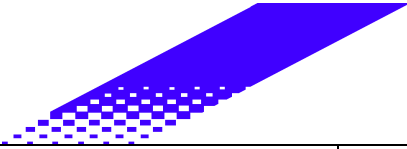


PCI Clock Rising Time	1ns~4ns	1.81	Pass
PCI Clock Falling Time	1ns~4ns	1.81	Pass
Comments:			

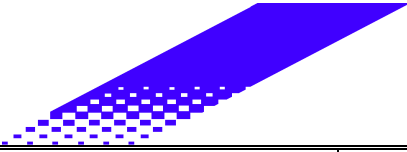


REQUIRED BIOS DEFAULT SETTINGS

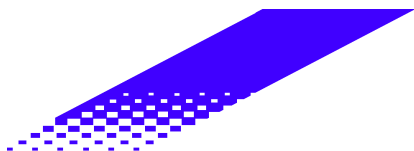
Lists	Specification	Result
BIOS FEATURES SETUP		
Boot Seq & Floppy Setup	Press Enter	Pass
First Boot Device	Floppy	Pass
Second Boot Device	HDD-0	Pass
Third Boot Device	LS-120	Pass
Boot Other Device	Enabled	Pass
Swap Floppy Seek	Disabled	Pass
Report NO FDD For WIN95	NO	Pass
Small Logo(EPA)Show	Enabled	Pass
Virus Warning	Disabled	Pass
Processor Number Feature	Disabled	Pass
Quick Power ON Self Test	Enabled	Pass
Boot Up Number Status	On	Pass
Typematic Rate Setting	Disabled	Pass
Typematic Rate(Chars/Sec)	6	Pass
Typematic Delay(MSEC)	250	Pass
Security Option	Setup	Pass
APIC Mode	Disabled	Pass
XMPS Version Control For OS1.4		Pass
OS Select For DRAM>64MB	Non-OS2	Pass
CHIPSET FEATURES SETUP		
System BIOS Cacheable	Disabled	Pass
Video BIOS Cacheable	Disabled	Pass
AGP Graphics Aperture Size	64M	Pass
System Memory Frequency	Auto	Pass
POWER MANAGEMENT SETUP		
ACPI Function	Enabled	Pass
ACPI Suspend Type	S1(POS)	Pass
Power Management	User Define	Pass
Video Off Method	V/H SYNC+Blank	Pass
Video Off In Suspend	Yes	Pass
Suspend Type	Stop Grant	Pass
Modem Use IRQ	NA	Pass
Suspend Mode	Disabled	Pass
HDD Power Down	Disabled	Pass
Soft-off by PWR-BTN	Instant-off	Pass
Wake-up by PCI card	Disabled	Pass
Power On by Ring	Disabled	Pass
Wake Up On LAN	Disabled	Pass
PWRON After PWR-Fail	Former-Sts	Pass



CPU Thermal-Throttling	50.0%	Pass
Resume by Alarm	Disabled	Pass
X Date(of Month) Alarm	0	Pass
X Time(hh:mm:ss) Alarm	0 0 0	Pass
Reload Global Timer Event	Press Enter	Pass
Primary IDE 0	Disabled	Pass
Primary IDE 1	Disabled	Pass
Secondary IDE 0	Disabled	Pass
Secondary IDE 1	Disabled	Pass
FDD,COM,LPT Port	Disabled	Pass
PCI PIRQ[A-D]#	Disabled	Pass
PnP / PCI CONFIGURATION		
Reset Configuration Data	Disabled	Pass
Resources Controlled By	Auto(ESCD)	Pass
X IRQ Resources	Press Enter	Pass
PCI/VGA Palette Snoop	Disabled	Pass
INTEGRATED PERIPHERALS		
On-Chip IDE Control	Press Enter	Pass
On-Chip Primary PCI IDE	Enabled	Pass
On-Chip Secondary	Enabled	Pass
IDE Primary Master PIO	Auto	Pass
IDE Primary Slave PIO	Auto	Pass
IDE Secondary Master PIO	Auto	Pass
IDE Secondary Slave PIO	Auto	Pass
IDE Primary Master UDMA	Auto	Pass
IDE Primary Slave UDMA	Auto	Pass
IDE Secondary Master UDMA	Auto	Pass
IDE Secondary Slave UDMA	Auto	Pass
IDE HDD Block Mode	Enabled	Pass
USB Controller	Enabled	Pass
USB Keyboard Support	Disabled	Pass
Init Display First	PCI Slot	Pass
AC97 Audio	Auto	Pass
AC97 Modem	Auto	Pass
Onboard FDC Controller	Enabled	Pass
Onboard Serial Port 1	3F8/IRQ4	Pass
Onboard Serial Port 2	2F8/IRQ3	Pass
UART Mode Select	Normal	Pass
RxD , TxD Active	Hi , Lo	Pass
IR Transmission Delay	Enabled	Pass
UR2 Duplex Mode	Half	Pass
Use IR Pins	IR-Rx2Tx2	Pass
Onboard Parallel Port	378/IRQ7	Pass

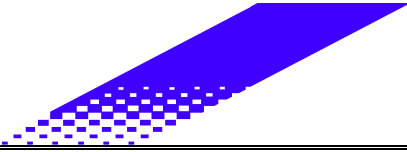


Paralle Port Mode	SPP	Pass
X ECP Mode Use DMA	EPP1.7	Pass
ECP Mode Use DMA	3	Pass
Game Port Address	201	Pass
Midi Port Address	330	Pass
Midi Port IRQ	10	Pass
PC Health Statues		Write Actual Values
Show H/W Monitor in POST		3 Sec
CPU Warning Temperature		Disabled
Current System Temp.		27°C/80°F
Current CPU Temp.		37°C/98°F
Current SYSFAN Speed		4440 RPM
Current CPU AN Speed		4687 RPM
1.5 V		1.66 V
3.3v		1.48 V
+5 V		4.97 V
+ 12 V		11.91 V
Shutdown Temperature		Disabled
Comments:		

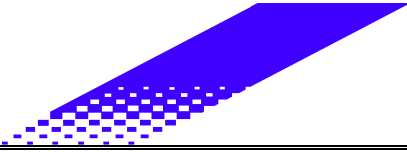


FUNCTIONALITY

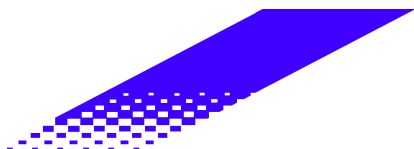
Setup Installation Test Of Operating System		Pass/Fail
DOS 6.22		Pass
Windows 98 Second Edition		Pass
Windows ME		Pass
Windows NT 4.0 Workstation		Pass
Windows 2000 Professional		Pass
Windows 2000 Server		Pass
Linux (Red Hat 7.1)		Pass
Windows XP Home Edition		Pass
Windows XP Professional		Pass
Basic On-board Function Test		
Test Platform	MS-DOS Operating	Comment
CPU	Pentium III 1G HZ	
Memory	NEC 256M	
HDD	Quantum 15 G	
CDROM	TEAC 40X	
Sound Card	Onboard	
Video Card	Power Color / TNT2	
LAN Card	Intel 82557 , 82559	
Test Item		Pass/Fail
Clear CMOS with Jumper		Pass
Cold Boot (Power Turn on)		Pass
CMOS Load Default Setup		Pass
Memory Size Counter Check		Pass
BIOS Lock Function		Pass
Warm Boot (HW/SW Reset)		Pass
System Configuration Review (CPU Type/Cache/SDRAM/HDD...)		Pass
Power Fail Function Test		Fail(Former-Sts fail)
Prompt Into DOS Mode		Pass
Test Some Of DOS Comment		Pass
Run Scandisk		Pass
PS/2 Keyboard Test		Pass
USB Keyboard Legacy Support Test		Pass
Boot Floppy Driver A		Pass
FDISK Hard Disk Driver		Pass
Format Hard Disk Driver		Pass
Boot Hard Disk Driver C		Pass
Power LED Check		Pass
HDD LED Check		Pass
Systems Speaker		Pass



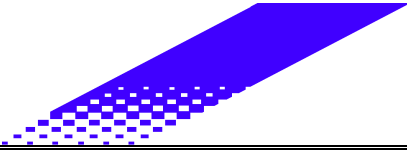
Buzz	None
SMI Function Test	---
SMI Pin Function Test	Pass
Time Out Function Test	Pass
Power LED Flash Check	Pass
CPU FAN Stop Check	None
Power On Control	---
Power On By RTC Test	Pass
Power On By LAN Test (Intel SPD3)	Pass
Power On By Modem Test	Pass
Boot Management	---
Boot Form CD-ROM	Pass
Boot From SCSI HDD	Pass
Boot From ATAPI ZIP/LS120 Drive	Pass
Boot From LAN	Pass
RTC Test	---
COMS RTC Date Check	Pass
Windows 98SE RTC Date Check	Pass
COMS RTC Time Out Test	Pass
Windows 98SE RTC Time Out Test	Pass
Memory Comparability Test	---
Bmem Memory Test (15 Times)	Pass
MEMTEST V2.44	Pass
Qaplus 7.0 Test	---
All Test	Pass
Checkit 4.0	---
System Board Test	Pass
Memory Test	Pass
Hard Disk Test	Pass
Floppy Test	Pass
Serial Port Test	Pass
Parallel Port Test	Pass
Modem Test	Pass
Video Card Test	Pass
Printer Test	Pass
Keyboard Test	Pass
AMIDdiag 6.0	---
System	---
Processor Test	Fail (Utility Fail)
DMA Controller Test	Pass
Interrupt Controller Test	Pass
Timer Test	Pass
Real Time Clock Test	Pass



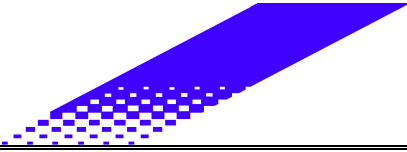
CMOS Validity Test	Pass
Speaker Test	Pass
PCI System Test	Pass
Plug-n-Play Test	Pass
Multimedia CPU Extensions	Pass
Memory	---
BIOS ROM Test	Pass
Parity Test	Pass
Pattern Test	Pass
Extended Pattern Test	Pass
Walking 1's Test	Pass
Walking 0's Test	Pass
Random Memory Test	Pass
Address Test	Pass
Refresh Test	Pass
Data Bus Test	Pass
Cache Memory Test	Pass
L2 Cache Test	Fail (Utility issue)
IDE	---
IDE HDD Test	Pass
IDE CD Test	Pass
FDD	---
Drive Speed Test	Pass
Random R/W Test	Pass
Sequential R/W Test	Pass
Elevator Seek Test	Pass
Disk Change Line Test	Pass
KBD	---
Controller Test	Pass
Scan/ASCII code test	Pass
Keyboard LED Test	Pass
Keyboard Clock Line Test	Pass
Keyboard Data Line Test	Pass
Video	---
Video Memory Test	Pass
Attribute Test	Pass
Page Selection Test	Pass
Color Test	Pass
Text Mode Test	Pass
Graphics Mode Test	Pass
VESA Video Mode Test	Pass
VESA Video Memory Test	Pass
VESA Monitor Test	Pass



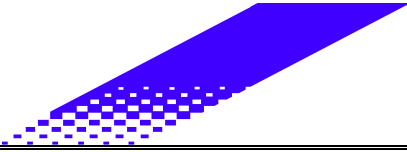
Misc.		---
Serial Port Test		Pass
Parallel Port Test		Pass
PS/2 Mouse Test		Pass
APM Functionality Test		Pass
Device APM Test		Pass
ACPI Test		Pass
I82557 Ethernet chip		Pass
Comments:		
Test Platform	Windows ME Operating	Comment
CPU	Pentium III 1G HZ	
Memory	NEC 256M *2	
HDD	IBM DTLA-307015	
CDROM	TEAC 40X	
Sound Card	Onboard	
Video Card	PROLINK /TNT2 M64	
CNR Card	Kingston / Modem + LAN	
LAN Card	Intel 82559	
Test Item		Pass/Fail
System Comparability Test		---
Windows ME Setup Installation Test		Pass
Supports Driver Installation Test		Pass
System Properties Information Review (System Device Manager)		Pass
Standby Mode Test		Pass
Shut Down Test		Pass
Restart Test		Pass
Scandisk Test		Pass
Enable DMA Mode For IDE Device Test		Pass
Disk Defragmenter Test		Pass
Setup installation Microsoft Office 2000 Test		Pass
Reboot The Windows Test For Over Night		Pass
Suspend To RAM (S3) Test		---
Standby Button for S3 (Enter)		Pass
Power Button for S3 (Enter and Wake up)		Pass
Windows Set RTC Time out for S3 (Enter and Wake up)		Pass
Enter S3 mode For 1/5/10/30/60/120/720 Minutes Then To Do Wake Up Test.		Pass
Wake Up By LAN Test		Pass
Wake Up By Ring Test		Pass
Enable Scheduled Task Runs at Specified time Test (RTC wake up)		Pass
Power LED Flash check		Pass



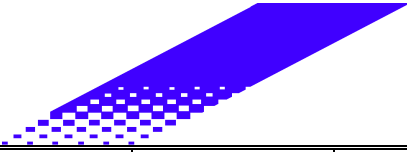
Onboard Audio For S3 Function Supports Test (Play CD/VCD/DVD/AVI)	Pass
Hibernate(S4) Test	---
Standby Button for S4 (Enter)	Pass
Power Button for S4 (Enter and Wake up)	Pass
Windows Set RTC Time out for S4 (Enter and Wake up)	Pass
Enter S4 mode For 1/5/10/30/60/120 Minutes Then To Do Wake Up Test.	Pass
Wake Up By LAN Test	Pass
Wake Up By Ring Test	Pass
Enable Scheduled Task Runs at Specified time Test (RTC wake up)	Pass
Memory Comparability Test	---
Running AVI Files With Multi Stress	Pass
Winstone 2000 Test	Pass
3D Mark 2001 Test (Continue loop 10)	Pass
BCM Memory Test	Pass
Device Comparability Test	---
PS/2 Connector Test	---
PS/2 Keyboard Test	Pass
PS/2 Mouse Test	Pass
COM Port Test	---
Add Serial Mouse PnP Test	Pass
Add Modem PnP Test	Pass
Print Port Test	---
Add Printer PnP Test	Pass
Add ZIP Device Test	Pass
LL5 Cable test (Data Transfer test)	Pass
IrDA Function Test	---
Add IR Printer Test	Pass
Peer to Peer Data Transfer Test (Ir-In/Ir-Out)	Pass
FDD Connector Test	---
Create Windows ME Startup Disk	Pass
Format 1.44 Floppy Driver	Pass
IDE Connectors Test	---
CD-ROM Data Read Test	Pass
DVD-ROM Data Read Test	Pass
Format ZIP Driver With Floppy A Type	Pass
Format ZIP Driver With Removable Device Type	Pass
LS120 Device Driver Test	Pass
PIO Mode 4 Hard Disk Test	Pass
Ultra DMA 33 Hard Disk Test	Pass
Ultra DMA 66 Hard Disk Test	Pass
Ultra DMA 100 Hard Disk Test	Pass
ZIP Device Driver Test	Pass
USB Ports Test	---



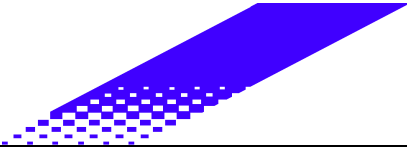
Add Keyboard PnP Test	Pass
Add Mouse PnP Test	Pass
Add Printer PnP Test	Pass
Add Scanner PnP Test	Pass
Add Camera PnP Test	Pass
Add Modem PnP Test	Pass
Add Joystick PnP Test	Pass
Add ZIP PnP Test	Pass
Add LAN PnP Test	Pass
PCI Slots Test	---
Add LAN Cards Test	
Boot ROM Function Test	Pass
Login Server Test	Pass
Peer to Peer 10Mbps or 100Mbps Data Transfer Test	Pass
Power On By LAN Test	Pass
Wake On LAN Test (Standby Mode)	Pass
Shut Down By The LAN Test	Pass
Playing AVI Files By The LAN	Pass
Setup Installation Winstone 2001 By The LAN	Pass
Setup Installation Winbench 99 By The LAN	Pass
Setup Installation 3D Mark2001 By The LAN	Pass
Add Token Ring LAN Card Test	Pass
Add Token Ring LAN Card Test	Pass
ADSL Link Test	Pass
Add SCSI Cards Test	
Add SCSI Cards For PnP Function Test	Pass
Setup installation the Windows from SCSI HDD	Pass
Scandisk Test	Pass
Disk Defragmenter Test	Pass
Disk Converter Test (FAT32)	Pass
System Properties Information Review (System Device Manager)	Pass
Setup installation Microsoft Office 2000 Test	Pass
Reboot The Windows Test For Over Night	Pass
Add Sound Card Test	
Add Sound Cards For PnP Function Test	Pass
Audio Drivers Setup Installation Test	Pass
System Properties Information Review	Pass
Audio Control Panel Function Test	Pass
Game Port Test	Pass
Sound Recorder Test	Pass
Run MPG Files	Pass
Speaker Out Quality Test	Pass
Playing Audio CD Test	Pass



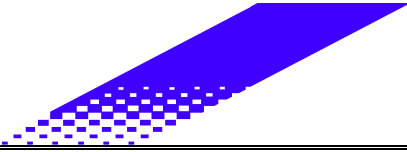
Playing Wave Test						Pass
Playing MIDI Test						Pass
Playing Video Test						Pass
Playing MP3 Test						Pass
CNR Slots Test						---
Add LAN Card Test						Pass
Add Modem Card Test						Pass
Add Home PNA Card Test						Pass
Add CNR Software Modem Card Test						Pass
Connect Performance Check						Pass
Internet Explorer Test						Pass
Netscape Browser Test						Pass
Connect to ISP For 12 hours						Pass
Download Files using AMR Modem (Over 10MB)						Pass
Modem Fax Function Test (Transmit a fax to Fax Machine)						Pass
Modem Fax Function Test (Transmit a fax to Modem)						Pass
Modem Fax Function Test (Receive a fax from Fax Machine)						Pass
Modem Fax Function Test (Receive a fax from Modem)						Pass
Send & Receive e-mail Test						Pass
Recording a MP3 File From Internet ISP Server						Pass
ADSL Link Test						Pass
VGA Function Test						---
VGA Drivers Setup Installation Test						Pass
Display Properties Information Review						Pass
Change Resolution / Color Test						Pass
Speedy 1.0						Pass
Run 3D Screen Saver						Pass
Run 3D Mark2001						Pass
Run XL-R8R						Pass
VGA Resolution Test (Monitor : ViewSonic GF775 /AGP: GF2 GTS Pro)						---
Resolution	Color Depth	Optimal	75 Hz	85 Hz	100 Hz	
640x480	16	√	none	none	none	Pass
640x480	256	√	√	√	√	Pass
640x480	16 bit	√	√	√	√	Pass
640x480	32 bit	√	√	√	√	Pass
800x600	256	√	√	√	√	Pass
800x600	16 bit	√	√	√	√	Pass
800x600	32 bit	√	√	√	√	Pass
1024x768	256	√	√	√	√	Pass
1024x768	16 bit	√	√	√	√	Pass
1024x768	32 bit	√	√	√	√	Pass
1152x864	256	√	√	√	none	Pass



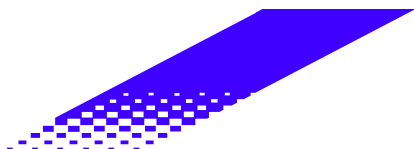
1152x864	16 bit	√	√	√	none	Pass
1152x864	32 bit	√	√	√	none	Pass
1280x1024	256	√	√	none	none	Pass
1280x1024	16 bit	√	√	none	none	Pass
1280x1024	32 bit	√	√	none	none	Pass
Check Screen Have No Any Shadow Or Garbage						Pass
Playing MPEG Files Test						Pass
Playing VCD Test						Pass
Playing DVD Test						Pass
3D Winbench 2000						---
3D Performance						Pass
3D Processing						Pass
3D Quality						Pass
3D WinMark						Pass
Playing *.AVI files (Stress Test for Over Night)						Pass
Audio Function Test						---
Audio Drivers Setup Installation Test						Pass
System Properties Information Review						Pass
Audio Control Panel Function Test						Pass
CD-In Function Check						Pass
Game Port Test						Pass
Line-In Function Check						Pass
Mic-In Function Check						Pass
R/L Channel Check						Pass
Sound Recorder Test						Pass
Run MPG Files						Pass
Speaker Out Quality Test						Pass
Telephony Function Supports						Pass
Playing Audio CD Test						Pass
Playing Wave Test						Pass
Playing MIDI Test						Pass
Playing Video Test						Pass
Playing MP3 Test						Pass
Onboard Audio For S1 Function Supports Test						Pass
Audio Winbench99 (Based onboard Sound controller)						---
Direct Sound CPU Util 44.1 kHz 16bit Static						---
Hardware Voices						0
Voice 8						0.163
Voice 16						0.623
Voice 32						1.72
DirectSound CPU Util , 44.1 kHz , 16 bits Streaming						---
Hardware Voice						0



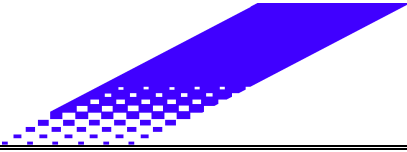
Voice 8	0.144
Voice 16	0.678
Voice 32	1.87
DirectSound CPU Util , 22 kHz , 8 bits Static	---
Hardware Voice	0
Voice 8	0
Voice 16	0.182
Voice 32	0.758
DirectSound CPU Util , 22 kHz , 8 bits Steaming	---
Hardware Voice	0
Voice 8	0
Voice 16	0.162
Voice 32	0.757
DirectSound3D CPU Util , 44.1 kHz , 16 bits Static	---
Hardware Voice	0
Voice 8	0.551
Voice 16	1.11
Voice 32	2.4
DirectSound3D CPU Util , 44.1 kHz , 16 bits Streaming	---
Hardware Voice	0
Voice 8	0.539
Voice 16	1.07
Voice 32	2.35
DirectSound3D CPU Util , 22 kHz , 8 bits Static	---
Hardware Voice	0
Voice 8	0.31
Voice 16	0.525
Voice 32	1.21
DirectSound3D CPU Util , 22 kHz , 8 bits Streaming	---
Hardware Voice	0
Voice 8	0.267
Voice 16	0.565
Voice 32	1.23
Windows Utility Test	---
BCM Diagnostics	---
System Info	Pass
DMI Info	Pass
Processor Test	Pass
Memory Test	Pass
Audio Test	Pass
Video Test	Pass
Graphics Test	Pass
Hard Disk Test	Pass



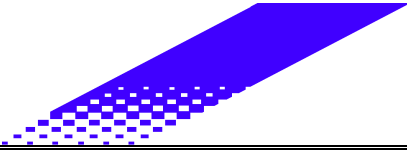
Floppy Disk Test (1.44 + IDE ZIP)	Pass
CD-ROM Test	Pass
Stress Test	Pass
MS Mouse	Pass
MS Joystick	Pass
MS ScanDisk	Pass
PC-Doctor For Windows	---
CPU Test	Pass
Hard Driver Test	Pass
Floppy Test	Pass
LS-120 Driver Test	Pass
CD-ROM/DVD Test	Pass
ZIP Driver Test	Pass
Memory Test	Pass
PCI Test	Pass
Video Test	Pass
AGP Test	Pass
Network Test	Pass
Modem Test	Pass
COM Loopback	Pass
Serial Port Internal Test	Pass
Parallel Port Internal Test	Pass
Parallel Port Loopback	Pass
USB Test	Pass
CMOS Test	Pass
Keyboard Test	Pass
AVI Video Test	Pass
Microphone Test	Pass
Audio Test	Pass
Mouse Test	Pass
Monitor Test	Pass
Printer Test	Pass
Joystick Test	Pass
BurnIn Test	---
CPU-Maths	Pass
CPU-MMX/SSE	Pass
Memory (RAM)	Pass
2D Graphics	Pass
3D Graphics	Pass
Hard Disk Test	Pass
Floppy Disk	Pass
Network Test	Pass
CD-ROM	Pass



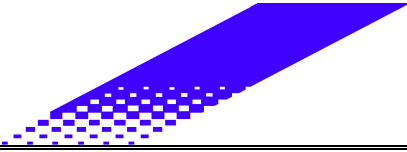
Winstone 2000	---
Winstone 2000	Pass
Winstone 2001	---
Business Winstone 2001	Pass
Content Creation Winstone 2001	Pass
Winbench 99 V1.2	---
Business Disk WinMark 99	Pass
Business Graphics WinMark 99	Pass
DirectDraw Tests	Pass
Disk Inspection Tests	Pass
Disk WinMark	Pass
GDI/USER Inspection Tests	Pass
High-End Disk WinMark 99	Pass
High-End Graphics WinMark 99	Pass
Video Tests	Pass
3D WinMark 2000	---
3D Marks	Pass
Demo Mode	Pass
3D WinMark 2001	---
3D Marks	Pass
Demo Mode	Pass
SYSMark2001	---
Internet Content Creation	Pass
Office Productivity	Pass
HCT Pretest(HCT9.5)	---
ACPI Pre-OS(all)	Pass
PCI Pre-OS(all)	Pass
MultiMedia(Dsound Driver Test)	Pass
MultiMedia(Full Duplex Test(Win9x))	Pass
Storage(MCI CD Test)	Pass
BIOS(Unreported I/O)	Pass
BIOS(Sysparse)	Pass
BIOS(Unreported Memory)	Pass
Legacy Free Test	Pass
Multimedia(Mixer Driver Test)	Pass
Multimedia(Wave Driver Test)	Pass
Video(Driver Scenario Test(PC99))	Pass
Video(Driver Scenario Test)	Pass
Video(AGP Transfer Mode Test)	Pass
Video(AGP Interface Test)	Pass
Video(DirectDraw Test)	Pass
Others	---
CD Winbench 99	Pass



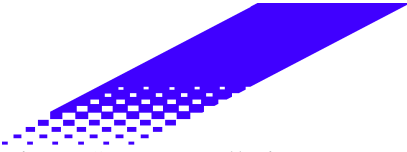
Final Reality	Pass
Intel Media Benchmark	Pass
3D Mark 99 Max	Pass
Power DVD Test	Pass
USBready	Pass
WinDVD 2000	Pass
Wintune 98 Test	Pass
CPU Stability Test	Pass
Game Test	---
BEYOND THIRD DIMENSION	Pass
Command & Conquer Red Alert	Pass
DIABLO	Pass
DID F22	Pass
DESCENT3	Pass
Doom II	Pass
Extreme-G2	Pass
Flight Simulator98	Pass
Forsaken	Pass
Grand Prix Championship	Pass
G-Police	Pass
HEXEN II	Pass
Incoming	Pass
Interstate'76	Pass
Janes WWII Fighters	Pass
Janes FLEET Command	Pass
Johnny Herbert's Grand Prix	Pass
LION KING	Pass
Moto Racer	Pass
Myst	Pass
Microsoft Midtown	Pass
Microsoft Motocross	Pass
Microsoft Age Of Empires	Pass
Microsoft Monster Truck	Pass
NBA Live99	Pass
O.ZONE	Pass
Quake III	Pass
Red Alert	Pass
Rush Hour	Pass
RedLine Racer	Pass
SEGA Manx TT	Pass
SEGA Rally 95	Pass
SEGA Daytona USA	Pass
Speed Demons	Pass



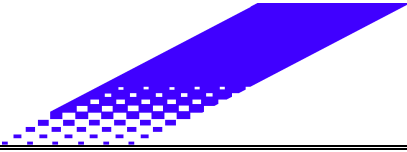
The Magic School Bus		Pass
Turok		Pass
Tonic Trouble		Pass
Tomb Raider II		Pass
Worms: 2		Pass
Comments:		
Test Platform	Windows2000 Operating	Comment
CPU	Pentium III 1GH	
Memory	Hyundai 256MB (128MBX2)	
HDD	IBM DTLA-307020 ATA-100	
CDROM	ACTIMA 50X	
Sound Card	On-Board CODEC	
Video Card	GeForce 2 GTS	
CNR Card	Kingston /Modem +LAN	
LAN Card	Intel 82550EY	
Test Item		Pass/Fail
System Comparability Test		---
Windows 2000 Setup Installation Test		Pass
Supports Driver Installation Test		Pass
System Properties Information Review		Pass
Standby Mode Test		Pass
Shut Down Test		Pass
Restart Test		Pass
Scandisk Test		Pass
Setup installation Microsoft Office 2000 Test		Pass
Hibernate(S4) Test		---
Standby Button for S4 (Enter)		Pass
Power Button for S4 (Enter and Wake up)		Pass
Windows Set RTC Time out for S4 (Enter and Wake up)		Pass
Enter S4 mode For 1/5/10/30/60/120 Minutes Then To Do Wake Up Test.		Pass
Wake Up By LAN Test		Pass
Wake Up By Ring Test		Pass
Enable Scheduled Task Runs at Specified time Test (RTC wake up)		Pass
Memory Comparability Test		---
Winstone 2001		---
Business Winstone 2001		Pass
Device Comparability Test		---
PS/2 Connector Test		---
PS/2 Keyboard Test		Pass



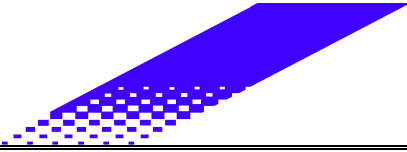
PS/2 Mouse Test	Pass
COM Port Test	---
Add Serial Mouse PnP Test	Pass
Add Modem PnP Test	Pass
Print Port Test	---
Add Printer PnP Test	Pass
FDD Connector Test	---
Format 1.44 Floppy Driver	Pass
IDE Connectors Test	---
PIO Mode 4 Hard Disk Test	Pass
Ultra DMA 33 Hard Disk Test	Pass
Ultra DMA 66 Hard Disk Test	Pass
Ultra DMA 100 Hard Disk Test	Pass
CD-ROM Test	Pass
DVD-ROM Data Read Test	Pass
ZIP Device Driver Test	Pass
Format ZIP Driver With Floppy A Type	Pass
Format ZIP Driver With Removable Device Type	Pass
LS120 Device Driver Test	Pass
LAN Cards Test	---
Boot ROM Function Test	Pass
Login Server Test	Pass
Peer to Peer 10Mbps or 100Mbps Data Transfer Test	Pass
Power On By LAN Test	Pass
Wake On LAN Test (Standby Mode)	Pass
Shut Down By LAN Test	Pass
PCI Slots Test	---
Add SCSI Card Test	Pass
Add LAN Card Test	Pass
Power On By LAN Test (Intel 82558B)	Pass
Wake On LAN Test (Standby Mode)	Pass
Shut Down By LAN Test	Pass
Add Token Ring LAN Card Test	Pass
Add Sound Card Test	Pass
Add Modem Card Test	Pass
Wake On Modem Test (Standby Mode)	Pass
Add Digital Video Card Test	Pass
CNR Slots Test	---
Add LAN Card Test	Pass
Add Home PNA Card Test	Pass
Add Modem Card Test	Pass
ADSL Link Test	Pass
VGA Function Test	---



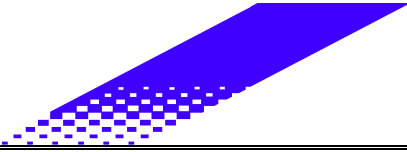
VGA Drivers Setup Installation Test	Pass
Display Properties Information Review	Pass
VGA Resolution All Test	Pass
Screen Saver Test	Pass
Check Screen Have No Any Shadow Or Garbage	Pass
Playing MPEG Files Test	Pass
Playing VCD Test	Pass
Playing DVD Test(With WinDVD 2000)	Pass
Audio Function Test	---
Audio Drivers Setup Installation Test	Pass
System Properties Information Review	Pass
Speaker Out Quality Test	Pass
R/L Channel Check	Pass
CD-In Function Check	Pass
Line-In Function Check	Pass
Mic-In Function Check	Pass
Audio Control Panel Function Test	Pass
Telephony Function Supports	Pass
Sound Recorder Test	Pass
Playing Audio CD Test	Pass
Playing Wave Test	Pass
Playing MIDI Test	Pass
Playing Video Test	Pass
Playing MP3 Test	Pass
Game Port Test	Pass
Windows2000 Utility Test	Pass/Fail
BCM Diagnostics	---
System Info	Pass
DMI Info	Pass
Processor Test	Pass
Memory Test	Pass
Audio Test	Pass
Video Test	Pass
Graphics Test	Pass
Hard Disk Test	Pass
Floppy Disk Test	Pass
CD-ROM Test	Pass
Stress Test –Loop 100	Pass
MS Mouse	Pass
MS Joystick	Pass
MS ScanDisk	Pass
Winbench 99 (1.2)	---
Business Disk WinMark 99	Pass



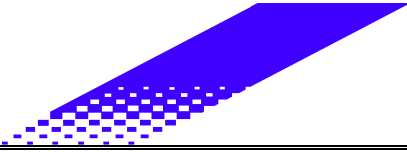
Business Graphics WinMark 99	Pass
DirectDraw Tests	Pass
Disk Inspection Tests	Pass
Disk WinMark	Pass
GDI/USER Inspection Tests	Pass
High-End Disk WinMark 99	Pass
High-End Graphics WinMark 99	Pass
Video Tests	Pass
Winstone 2001	---
Business Winstone 2001	Pass
Content Creation Winstone 2001	Pass
SYSMark2001	---
Internet Content Creation	Pass
Office Productivity	Pass
HCT Pretest(HCT9.5)	---
Storage(SdStress)	Pass
Storage(CD Copy Compare)	Pass
Storage[FAT(File I/O)]	Pass
Storage[NTFS(File I/O)]	Pass
Storage[Mapped(File I/O)]	Pass
Storage(Floppy I/O)	Pass
Storage(SysCache)	Pass
Video(GDI w/poly.Clip_256)	Pass
Ports	Pass
Memory(AWE)	Pass
Stress[Disk_CD(Stress)]	Pass
Stress[Disk(Stress)]	Pass
Stress[Disk (Stress)Individual Drive]	Pass
Stress(Performance Counter Check)	Pass
Stress(System Stress)	Pass
BIOS[Unreported I/O(NT5.0)]	Pass
System \ ACPI \ ACPI SystemTest(Win2K)	Pass
System \ ACPI \ ACPI Stress	Pass
Multimedia	Pass
Modem	Pass
VDM	Pass
Others	---
SYSmark 98	Pass
Wintune 98 Test	Pass
SYSmark 2000	Pass
SYSmark 2001	Pass
Game Test	---
3D Pinball	Pass



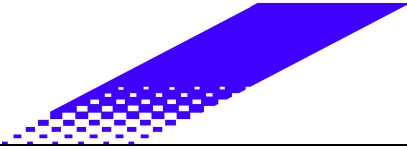
Freecell		Pass
Minesweeper		Pass
Solitaire		Pass
Forsaken		Pass
Quake III		Pass
Age Of Empire		Pass
Tomb Raider 2		Pass
Comments:		
Test Platform	Windows 98 SE Operating	Comment
CPU	Pentium III-1200	
Memory	NEC 128M X2	
HDD	MAXTOR 91024U3	
CDROM	PHILIPS 48X	
Sound Card	On board	
Video Card	Viper V770	
LAN Card	3 COM 3C905	
Test Item		Pass/Fail
System Comparability Test		---
Windows 98 Setup Installation Test		Pass
Supports Driver Installation Test		Pass
Standby Mode Test		Pass
Shut Down Test		Pass
Restart Test		Pass
Enable DMA Mode For IDE Device Test		Pass
Scandisk Test		Pass
Disk Defragmenter Test		Pass
Disk Converter Test (FAT32)		Pass
System Properties Information Review		Pass
Setup installation Microsoft Office 2000 Test		Pass
Suspend To RAM (S3) Test		---
Standby Button for S3 (Enter)		Pass
Power Button for S3 (Enter and Wake up)		Pass
Windows Set RTC Time out for S3 (Enter and Wake up)		Pass
Enter S3 mode For 1/5/10/30/60/120/720 Minutes Then To Do Wake Up Test.		Pass
Wake Up By LAN Test		Pass
Wake Up By Ring Test		Pass
Enable Scheduled Task Runs at Specified time Test (RTC wake up)		Pass
VGA Function Test		---
VGA Drivers Setup Installation Test		Pass



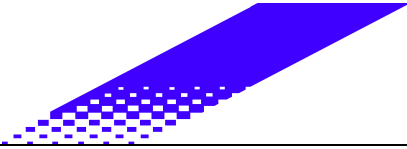
Display Properties Information Review						Pass
Change Resolution / Color Test						Pass
Run 3D Screen Saver						Pass
Run 3D Games						Pass
VGA Resolution Test (Monitor : View Sonic GF775 /AGP: GF2 GTS Pro)						---
Resolution	Color Depth	Optimal	75 Hz	85 Hz	100 Hz	
640x480	16	√	none	none	none	Pass
640x480	256	√	√	√	√	Pass
640x480	16 bit	√	√	√	√	Pass
640x480	32 bit	√	√	√	√	Pass
800x600	256	√	√	√	√	Pass
800x600	16 bit	√	√	√	√	Pass
800x600	32 bit	√	√	√	√	Pass
1024x768	256	√	√	√	√	Pass
1024x768	16 bit	√	√	√	√	Pass
1024x768	32 bit	√	√	√	√	Pass
1152x864	256	√	√	√	none	Pass
1152x864	16 bit	√	√	√	none	Pass
1152x864	32 bit	√	√	√	none	Pass
1280x1024	256	√	√	none	none	Pass
1280x1024	16 bit	√	√	none	none	Pass
1280x1024	32 bit	√	√	none	none	Pass
Check Screen Have No Any Shadow Or Garbage						Pass
Playing MPEG Files Test						Pass
Playing VCD Test						Pass
Playing DVD Test						Pass
Playing *.AVI files (Stress Test for Over Night)						Pass
Windows Utility Test						---
Winstone 2001						---
Business Winstone 2001						Pass
Content Creation Winstone 2001						Pass
Winbench 99 (1.2)						---
Business Disk WinMark 99						Pass
Business Graphics WinMark 99						Pass
DirectDraw Tests						Pass
Disk Inspection Tests						Pass
Disk WinMark						Pass
GDI/USER Inspection Tests						Pass
High-End Disk WinMark 99						Pass
High-End Graphics WinMark 99						Pass
Video Tests						Pass
Others						---



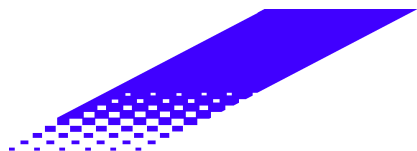
BAPCo SYSmark 2000		Pass
3Dmark 2000		Pass
Final Reality		Pass
WinDVD 2000		Pass
Comments:		
Test Platform	Windows XP (Home Edition) Operating	Comment
CPU	Pentium III 1GH	
Memory	SIEMENS 256MB (128MBX2)	
HDD	Quantum AS30000AT ATA-100	
CDROM	Samsung DVD SD-12S	
Sound Card	On-Board CODEC	
Video Card	GeForce 2 GTS	
LAN Card	3COM 3C905C-TX	
Test Item		Pass/Fail
System Comparability Test		---
Windows 2000 Setup Installation Test		Pass
Supports Driver Installation Test		Pass
System Properties Information Review		Pass
Standby Mode Test		Pass
Shut Down Test		Pass
Restart Test		Pass
Scandisk Test		Pass
Setup installation Microsoft Office 2000 Test		Pass
Windows Utility Test		---
BurnIn Test		---
CPU-Maths		Pass
CPU-MMX/SSE		Pass
Memory (RAM)		Pass
2D Graphics		Pass
3D Graphics		Pass
Hard Disk Test		Pass
Floppy Disk		Pass
Network Test		Pass
CD-ROM		Pass
Winstone 2001		---
Business Winstone 2001		Pass
Content Creation Winstone 2001		Pass
3D Mark 2001		---
Benchmark		Pass



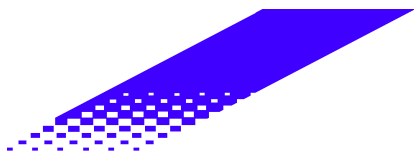
Demo		Pass
Others		---
3Dmark 2000		Pass
XL-R8R		Pass
Comments:		
Test Platform	Windows XP (Professional) Operating	Comment
CPU	Pentium III 1GH	
Memory	SIEMENS 256MB (128MBX2)	
HDD	Quantum AS30000AT ATA-100	
CDROM	Pioneer DVD-116 ATA-66	
Sound Card	On-Board CODEC	
Video Card	GeForce 2 GTS	
LAN Card	3COM 3C905C-TX	
Test Item		Pass/Fail
System Comparability Test		---
Windows 2000 Setup Installation Test		Pass
Supports Driver Installation Test		Pass
System Properties Information Review		Pass
Standby Mode Test		Pass
Shut Down Test		Pass
Restart Test		Pass
Scandisk Test		Pass
Setup installation Microsoft Office 2000 Test		Pass
Windows Utility Test		---
BurnIn Test		---
CPU-Maths		Pass
CPU-MMX/SSE		Pass
Memory (RAM)		Pass
2D Graphics		Pass
3D Graphics		Pass
Hard Disk Test		Pass
Floppy Disk		Pass
Network Test		Pass
CD-ROM		Pass
Winstone 2001		---
Business Winstone 2001		Pass
Content Creation Winstone 2001		Pass
3D Mark 2001		---
Benchmark		Pass



Demo		Pass
Others		---
3Dmark 2000		Pass
XL-R8R		Pass
Comments:		
Test Platform	Linux (Red Hat 7.1) Operating	Comment
CPU	Pentium III Tualatin 1.2GHz	
Memory	Buffalo 128M pc-133 x1	
HDD	IBM desktop 30G ata-100	
CDROM	Teac cd-540e	
Sound Card	Onboard	
Video Card	Asus 3800	
LAN Card	D-Link de-530	
Test Item		Pass/Fail
System Comparability Test		---
Linux Setup Installation Test		Pass
Shut Down Test		Pass
Restart Test		Pass
Device Comparability Test		---
PS/2 Connector Test		---
PS/2 Keyboard Test		Pass
PS/2 Mouse Test		Pass
COM Port Test		---
Add Serial Mouse Test		Pass
Add Modem Test		Pass
FDD Connector Test		---
Read 1.44 Floppy Disk		Pass
Format 1.44 Floppy Driver		Pass
IDE Connectors Test		---
CD-ROM Data Read Test		Pass
DVD-ROM Data Read Test		Pass
LAN Ports Test		---
Peer to Peer Data Transfer Test		Pass
PCI Slots Test		---
Add SCSI Card Test		Pass
Add LAN Card Test		Pass
Add Sound Card Test		Pass

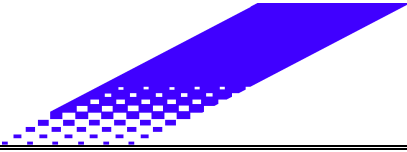


Comments:

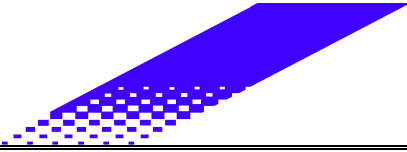


RAID Function Test (Optional)

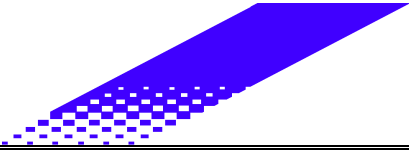
Test Platform	Windows ME Operating	Comment
CPU	Intel Pentium III 1000 MHz	
Memory	SIEMENS 128X2	
HDD 1	IBM DTLA 307030	
HDD 2	IBM DTLA 307030	
CDROM	SONY CDU711	
Sound Card	On board	
Video Card	ELSA	
LAN Card	Intel 82559	
RAID Function Test Of BIOS		Pass/Fail
BIOS Setting		---
Press Ctrl+H For BIOS Setting Of HPT370 RAID		Pass
Create RAID 0 (Striping For Performance)		---
Create RAID :Array Mode Striping (RAID 0)		Pass
Select Disk Drivers		Pass
Start Creation Process		Pass
Fdisk		Pass
Format Disk Drivers		Pass
Check HDD Total size (HDD1+HDD2)		Pass
Setup Installation The Windows From CD-ROM		Pass
Setup Driver CD For RAIN Administrator Test		Pass
Scandisk Test		Pass
Disk Defragmenter Test		Pass
Standby (S1) Mode Test		Pass
Suspend To RAM (S3) Test		Pass
Hibernate (S4) Mode Test		Pass
Performance Test for RAID 0		Pass
Delete RAID in the BIOS utility		Pass
Create RAID 1 (Mirror For Security)		---
Create RAID :Array Mode Mirror (RAID 1)		Pass
Select Disk Drivers		Pass
Start Creation Process		Pass
Select Boot Disk		Pass
Start Duplication Process		Pass
Fdisk		Pass
Format Disk Drivers		Pass
Setup Installation The Windows From CD-ROM		Pass
Setup Driver CD For RAIN Administrator Test		Pass
Scandisk Test		Pass
Disk Defragmenter Test		Pass
Standby (S1) Mode Test		Pass



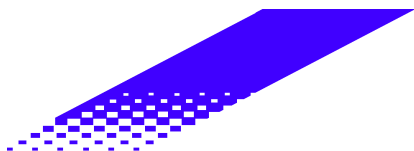
Suspend To RAM (S3) Test		Pass
Hibernate (S4) Mode Test		Pass
Hot Swap The Source Disk Test		Pass
Add Physical Disk To Mirror Array		Pass
Synchronize Mirror (Auto)		Pass
Hot Swap The Target Disk Test		Pass
Add Physical Disk To Mirror Array		Pass
Synchronize Mirror (Auto)		Pass
Compare The Source Disk and The Target Disk		Pass
Create Span (JBOD)		---
Create Span Array		Pass
Select Disk Drivers		Pass
Start Creation Process		Pass
Select Boot Disk		Pass
Fdisk		Pass
Format Disk Drivers		Pass
Check HDD Total size (HDD1+HDD2)		Pass
Setup Installation The Windows From CD-ROM		Pass
Setup Driver CD For RAIN Administrator Test		Pass
Scandisk Test		Pass
Disk Defragmenter Test		Pass
Standby (S1) Mode Test		Pass
Create RAID 0+1 (Striping + Mirror)		---
Test Platform	Windows 2000 Operating	Comment
CPU	Athlon 1333 GHz	
Memory	Samsung DDR 128MX2	
HDD 1	Samsung SV1021D	
HDD 2	Samsung SV1021D	
HDD 3	Samsung SV1021D	
HDD 4	Samsung SV1021D	
CDROM	SONY CDU711	
Sound Card	On board	
Video Card	Diamond Viper 770 / TNT2	
LAN Card	Intel 82559	---
Create RAID :Array Mode Striping (RAID 0) For RAID IDE1 Cannel		Pass
Select Disk Drivers		Pass
Start Creation Process		Pass
Create RAID :Array Mode Striping(RAID 0) For RAID IDE2 Cannel		Pass
Select Disk Drivers		Pass
Start Creation Process		Pass
Create RAID:Array Mode Mirror (RIAD 0+1)		Pass
Select Disk Drivers		Pass
Start Creation Process		Pass



Start Duplication Process	Pass
Select Boot Disk	Pass
Fdisk	Pass
Format Disk Drivers	Pass
Check HDD Total size (HDD1+HDD2)	Pass
Setup Installation The Windows From CD-ROM	Pass
Setup Driver CD For RAIN Administrator Test	Pass
Scandisk Test	Pass
Disk Defragmenter Test	Pass
Standby (S1) Mode Test	Pass
Hibernate (S4) Mode Test	Pass
Compare The Source Disk and The Target Disk	Pass
Performance Test for RAID 1	Pass
RAID Administrator Test For The Windows	---
Mirror	---
Create Mirror Array	Pass
Synchronize Mirror (Auto)	Pass
Hot Swap The Source Disk Test	Pass
Add Physical Disk To Mirror Array	Pass
Synchronize Mirror (Auto)	Pass
Hot Swap The Target Disk Test	Pass
Add Physical Disk To Mirror Array	Pass
Synchronize Mirror (Auto)	Pass
Compare The Source Disk and The Target Disk	Pass
Scandisk Test	Pass
Disk Defragmenter Test	Pass
Standby (S1) Mode Test	Pass
Suspend To RAM (S3) Test	Pass
Hibernate (S4) Mode Test	Pass
Performance Test for RAID 1	Pass
Remove Mirror	Pass
Span	---
Create Span Array	Pass
Restart the Windows	Pass
Scandisk Test	Pass
Disk Defragmenter Test	Pass
Standby (S1) Mode Test	Pass
Suspend To RAM (S3) Test	Pass
Hibernate (S4) Mode Test	Pass
Remove Span	Pass
Stripe	---
Create Stripe Array	Pass
Restart the Windows	Pass



Scandisk Test	Pass
Disk Defragmenter Test	Pass
Standby (S1) Mode Test	Pass
Suspend To RAM (S3) Test	Pass
Hibernate (S4) Mode Test	Pass
Performance Test for RAID 0	Pass
Remove Stripe	Pass
Comments:	

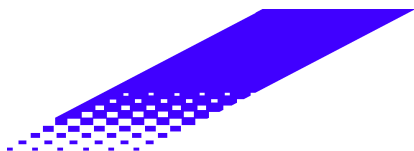


RELIABILITY TEST

Motherboard General Information	
Vendor	Biostar
Model Number	M6TSU
Temperature rate (°C)	0 ~ 45 °C
Humidity rate (%)	0 ~ 60 %
Time (hr)	72 hr
OS	Windows Me
Test Program	Continuous Play DVD + Tomb2 DEMO

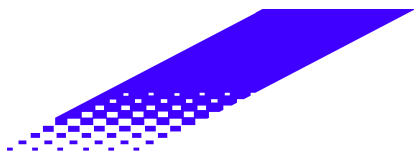
Burn-in Step	
STEP 1	Temperature 0°C ~ Humidity none ~ 12 hr.
STEP 2	Temperature 45°C ~ Humidity 60% ~ 12 hr.
STEP 3	Temperature 0°C ~ Humidity none ~ 24 hr.
STEP 4	Temperature 45°C ~ Humidity 60% ~ 24 hr.
STEP 5	END.

Item	Revision	Initiation Date	Finish Date	CPU (MHz)	DIMM (MB)	VGA Card	Pass/Fail	Solution
1	0.90	2001/7/26	2001/7/29	PIII 1G	Infineon 128M*3	GF2 GTS Pro	Pass	
2	1.0	2001/9/3	2001/9/6	PIII 1G	Infineon 128M*3	GF2 GTS Pro	Pass	
Comments:								

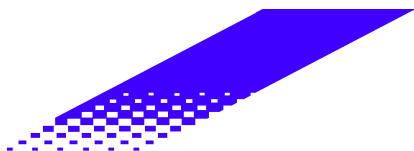


OVER CLOCK TEST

Test Platform	Windows Me (FSB:100 MHz)			
CPU	Celeron 1100			
Memory	Winbond 256M X2			
HDD	IBM DTLA-307030			
CD-ROM	LITEON LTN-362			
Sound Card	On board			
Video Card	ASUS V7700			
CPU Front Side Bus Clock	100	110		
Winstone 2001				
Business Winstone 2001	33.8	36.7		
Content Creation Winstone2001	39.3	43		
Comments:				
3D Winbench 2000 (1.1)				
3D WinMark	102	107		
Comments:				
3D Mark 2001				
Overall	2040	2276		
Comments:				
These tests only just for reference.				

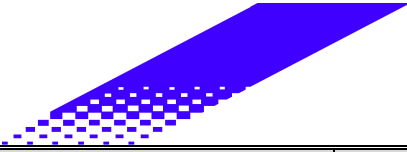


Test Platform	Windows Me (FSB:133 MHz)			
CPU	PIII- 1200			
Memory	Winbond 256M X2			
HDD	IBM DTLA-307030			
CD-ROM	LITEON LTN-362			
Sound Card	On board			
Video Card	ASUS V7700			
CPU Front Side Bus Clock	133	140		
Winstone 2001				
Business Winstone 2001	45.6	46.7		
Content Creation Winstone2001	51.4	53.7		
Comments:				
3D Winbench 2000				
3D WinMark	117	115		
Comments:				
3D Mark 2001				
Overall	2901	2942		
Comments:				
These tests only just for reference.				

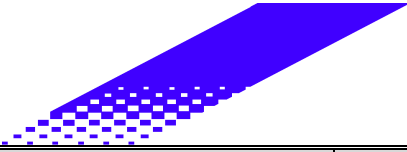


PERFORMANCE TEST

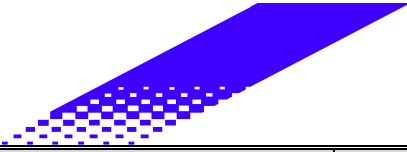
Test Platform	Windows ME			
Memory	WINBOND 256M X2			
HDD	IBM DTLA-307030			
CD-ROM	LITEON LTN-362			
Sound Card	On board			
Video Card	ASUS V7700			
CPU	Celeron 766	Celeron 1100	PIII-850	PIII-1000
Winstone 2001				
Business Winstone 2001	23	33.8	34.9	40.4
Content Creation Winstone2001	25.7	39.3	37.6	44.3
Comments:				
Winbench 99(1.2)				
Business Disk WinMark 99	5010	5470	5340	5510
High-End Disk WinMark 99	18100	19400	20200	20500
Business Graphics WinMark 99	256	368	376	439
Hi-End Graphics WinMark 99	786	1120	1010	1210
Comments:				
3D Winbench 2000 (1.1)				
3D WinMark	99.8	105	108	114
Comments:				
3D Mark 2001				
Overall	1644	2040	2296	2680
Comments:				
SYSmark 2001				
Internet Content Creation	62	88	88	108
Office Productivity	64	46	71	85
Comments:				



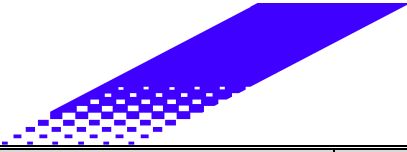
Test Platform	Windows ME			
Memory	WINBOND 256M X2			
HDD	IBM DTLA-307030			
CD-ROM	LITEON LTN-362			
Sound Card	On board			
Video Card	ASUS V7700			
CPU	PIII-1200			
Winstone 2001				
Business Winstone 2001	45.6			
Content Creation Winstone2001	51.4			
Comments:				
Winbench 99(1.2)				
Business Disk WinMark 99	5550			
High-End Disk WinMark 99	20700			
Business Graphics WinMark 99	542			
Hi-End Graphics WinMark 99	1460			
Comments:				
3D Winbench 2000 (1.1)				
3D WinMark	117			
Comments:				
3D Mark 2001				
Overall	2901			
Comments:				
SYSmark 2001				
Internet Content Creation	131			
Office Productivity	130			
Comments:				



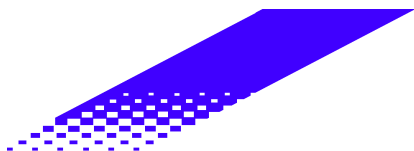
Test Platform	Windows2000			
Memory	HYUNDAI 256MB (128MBX2)			
HDD	QUANTUM AS30000AT ATA-100			
CD-ROM	CREATIVE 52X			
Sound Card	On-Board CODEC			
Video Card	GEFROCE 2 GTS			
CPU	Celeron-900	PIII-850	PIII-933	PIII-1000
Winstone 2001				
Business Winstone 2001	31.4	36.8	38.9	41.8
Content Creation Winstone2001	41.5	44	50	53.2
Comments:				
Winbench 99 (1.2)				
Business Disk WinMark 99	7380	7560	7650	7830
High-End Disk WinMark 99	22800	23200	23300	23300
Business Graphics WinMark 99	258	339	384	410
Hi-End Graphics WinMark 99	625	752	835	904
Comments:				
SYSmark 2000				
SYSmark BAPCo 2000	150	173	194	208
Comments:				
3D Mark 2001				
3D Marks	1624	1882	2027	2095
Comments:				



Test Platform	RAID Performance Windows ME		
CPU	Pentium III 1200 MHz		
Memory	Samsung 512M		
HDD	IBM DTLA 307030 30G ATA-100		
CD-ROM	SONY CDU 711		
Sound Card	Onboard		
Video Card	ELSA GLADIAC 920 (Geforce 3)		
RAID Array	RAID 0	RAID 1	None RAID
Winstone 2001			
Business Winstone 2001	46.9	45.2	44.6
Content Creation Winstone2001	51.9	50.5	51.1
Comments:			
Winbench 99(1.2)			
Business Disk WinMark 99	10600	7710	5570
High-End Disk WinMark 99	30700	22100	20600
Business Graphics WinMark 99	536	527	532
Hi-End Graphics WinMark 99	1450	1440	1440
Comments:			
3D Mark 2001			
Overall	5118	5117	5118
Comments:			

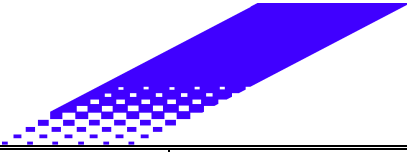


Test Platform	RAID Performance Windows 2000		
CPU	Pentium III 1G MHz		
Memory	HYUNDAI 256MB (128 MB X 2)		
HDD	IBM DTLA-307015 ATA-100		
CD-ROM	CREATIVE DVD 1242E ATA-33		
Sound Card	On-Board CODEC		
Video Card	GeForce MX		
RAID Array	RAID 0	RAID 1	None RAID
Winstone 2001			
Business Winstone 2001	44.5	40.7	41.8
Content Creation Winstone2001	56.5	54	53.2
Comments:			
Winbench 99(1.2)			
Business Disk WinMark 99	8420	7690	7560
High-End Disk WinMark 99	29800	22000	23200
Business Graphics WinMark 99	413	409	339
Hi-End Graphics WinMark 99	905	901	752
Comments:			
3D Mark 2001			
Overall	2089	2071	2068
Comments:			
SYSmark 2000			
SYSmark BAPCo 2000	216	209	208
Comments:			



HARDWARE COMPATIBILITY LIST

CPU				
Vendor	Model	Frequency	Type	Result
Intel	Pentium III	550 MHz	FC-PGA	Pass
Intel	Pentium III	600 MHz	FC-PGA	Pass
Intel	Pentium III	650 MHz	FC-PGA	Pass
Intel	Pentium III	667 MHz	FC-PGA	Pass
Intel	Pentium III	700 MHz	FC-PGA	Pass
Intel	Pentium III	733 MHz	FC-PGA	Pass
Intel	Pentium III	800 MHz	FC-PGA	Pass
Intel	Pentium III	850 MHz	FC-PGA	Pass
Intel	Pentium III	866 MHz	FC-PGA	Pass
Intel	Pentium III	933 MHz	FC-PGA	Pass
Intel	Pentium III	933 MHz (1.7 V)	FC-PGA	Pass
Intel	Pentium III	1000 MHz / 1GHz	FC-PGA	Pass
Intel	Pentium III	1.2 GHz	PPGA	Pass
Intel	Celeron	566 MHz	FC-PGA	Pass
Intel	Celeron	600 MHz	FC-PGA	Pass
Intel	Celeron	700 MHz	FC-PGA	Pass
Intel	Celeron	766 MHz	FC-PGA	Pass
Intel	Celeron	800 MHz	FC-PGA	Pass
Intel	Celeron	850 MHz	FC-PGA	Pass
Intel	Celeron	900 MHz	FC-PGA	Pass
Intel	Celeron	950 MHz	FC-PGA	Pass
Intel	Celeron	1100 MHz	FC-PGA	Pass
Comments:				
CD-ROM				
Vendor	Model	Transfer Rate	Type	Result
ASUS	CD-500/A	50X	ATAPI	Pass
ACER	650P-072	50X	ATAPI	Pass
ACER	620A-004	20X	ATAPI	Pass
ACTIMA	A-50	50x	ATAPI	Pass
A-OPEN	CD-948E	48X	ATAPI	Pass
BTC	BCD 40XJ	40x	ATAPI	Pass
BTC	BCD F562B	52X	ATAPI	Pass
CREATIVE	CD-2421E	42X	ATAPI	Pass
DELTA	OIP-CD4800A	48X	ATAPI	Pass
LITE-ON	LTN-362	36X	ATAPI	Pass
LITE-ON	40X MAX	40X	ATAPI	Pass



LITE-ON	LTN-483L	48X	ATAPI	Pass
NEC	CDR-3000	32X	ATAPI	Pass
PHILIPS	PCA328CD	32X	ATAPI	Pass
PHILIPS	PCCD048	48X	ATAPI	Pass
PLEXTOR	PX-32TSI(SCSI)	32X	SCSI	Pass
SONY	CDU711	32X	ATAPI	Pass
SONY	CDU4811	48X	ATA-33	Pass
SONY	CRX100E		ATAPI	Pass
SONY	CDU-5211	52X	ATAPI	Pass
TEAC	CD-540E	40X	ATAPI	Pass
TEAC	CD-532E	32X	ATAPI	Pass
TEAC	CD-532S	32X	SCSI	Pass

Comments:

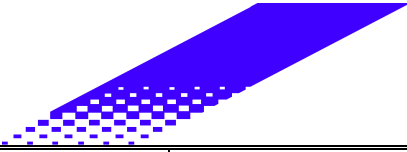
Camera Device

Vendor	Model	Type	Drivers	Result
3COM	3718	USB	6.6.0.21	Pass
Logitech	QUICK CAM	USB	CD-Ver 4.1	Pass
Logitech	QUICK CAM HOME	USB	1.0.3.1425	Pass
Kodak	DC240	USB		Pass
O'RIT	M-318	USB	CD-Ver 0.91	Pass

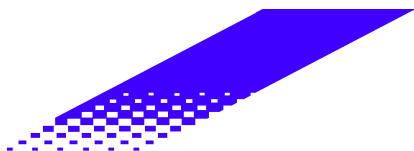
Comments:

DVD-ROM

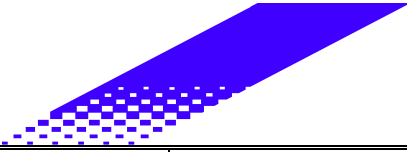
Vendor	Model	Transfer Rate	Type	Result
CREATIVE	DVD2240E	4X	ATAPI	Pass
CREATIVE	DVD6240E	6X	ATAPI	Pass
CREATIVE	DVD8401E	8X	ATAPI	Pass
CREATIVE	DVD1242E	12X	ATA-33	Pass
HITACHI	GD-2000	2X	ATAPI	Pass
PIONEER	DVD-113	10X	ATAPI	Pass
PIONEER	DVD-114	12X	ATAPI	Pass
PIONEER	DVD-115	16X	ATAPI	Pass
PIONEER	DVD-105S	16X	ATAPI	Pass
PIONEER	DVD-116	16X	ATA-66	Pass
TOSHIBA	SM-M1102	2X	ATAPI	Pass
TOSHIBA	SD-M1302	4X	ATAPI	Pass
TOSHIBA	SD-M1402	6X	ATAPI	Pass



ACTIMA	AD-10S	10X	ATA-33	Pass
SAMSUNG	SD-12S	12X	ATA-33	Pass
Comments:				
Display Card				
Vendor	Model	Chips	Drivers	Result
3Dfx	Voodoo3 3000		4.12.01.0666	Pass
3Dfx	Voodoo3 3500		4.12.01.0638	Pass
3Dfx	Voodoo5 5500		4.12.01.0666	Pass
ASUS	AGP-V 3800M	RIVA TNT2 M64	4.12.01.0650	Pass
ASUS	AGP-V 3800	RIVA TNT2	4.12.01.1241	Pass
ASUS	AGP-V6800 DDR	Geforce256	4.12.01.1241	Pass
ASUS	AGP-V6600 PRO/64M	Geforce256	4.12.01.1241	Pass
ASUS	AGP-V7700	Geforce 2 GTS	4.12.01.1241	Pass
ATI	Rage 128 32M		4.13.7078	Pass
ATI	ALL-IN-WONDER 128		4.13.7078	Pass
ATI	Rage FURY PRO		4.13.7078	Pass
ATI	XPRT 2000		4.13.7078	Pass
ATI	XPRT 2000 PRO		4.13.7078	Pass
ATI	RADEON		4.13.7075	Pass
ATI	All-in-wonder RADEON		4.13.7075	Pass
DIAMOND	Viper V330	RIVA 128	4.12.01.1241	Pass
DIAMOND	Viper V770	RIVA TNT2	4.12.01.1241	Pass
ELSA	ERAZOR X	Geforce256	4.12.01.0650	Pass
ELSA	ERAZOR	Geforce 2 GTS	4.12.01.0650	Pass
ELSA	ERAZOR III LT-A32	RIVA TNT2 M64	4.12.01.0650	Pass
ELSA	GLADIAC ULTRA	Geforce 2 ULTRA	4.12.01.1241	Pass
ELSA	GLADIAC 511	Geforce 2 MX400	4.12.01.1241	Pass
ELSA	SYNERGY III	Quadro 2 MXR	4.12.01.1241	Pass
ELSA	GLADIAC 920	NVIDIA Geforce3	4.12.01.1241	Pass
Matrox	G400 32MB		4.12.01.1760	Pass
Matrox	G450		4.12.01.1760	Pass
PROLINK	TNT2 M64	RIVA TNT2 M64	4.12.01.1241	Pass
Winfast	Geforce256	Geforce256	4.12.01.1241	Pass
Winfast	S325	RIVA TNT2 M64	4.12.01.1241	Pass
ECS	VS315	SiS 315	4.13.01.2020	Pass
Comments:				



FDD				
Vendor	Model	Size	Type	Result
MITSUMI	D359T5	1.44		Pass
MITSUMI	D359T6	1.44		Pass
MITSUMI	D353T6	1.44		Pass
MITSUMI	D359M3	1.44		Pass
MITSUMI	D353M3	1.44		Pass
NEC	FD1231H	1.44		Pass
TEAC	FD-235HF	1.44		Pass
SONY	MPF920-E	1.44		Pass
Panasonic	JU257A606P	1.44		Pass
SUMSUNG	SFD-321B	1.44		Pass
Comments:				
HDD				
Vendor	Model	Size	Type	Result
FUJITSU	MPD3108AT	10.8G	ATAPI	Pass
FUJITSU	MPG3307AT	30.7G	ATA-100	Pass
IBM	DJNA-370910	9.1G	ATA-66	Pass
IBM	DPTA-372050	20G	ATA-100	Pass
IBM	DNES-309170	9.1G	SCSI	Pass
IBM	DCAS-34330	4.3G	WIDE SCSI	Pass
IBM	DHEA-36481	6.4G	ATA-66	Pass
IBM	DHEA-DPTA-372050	20G	ATA-66	Pass
IBM	DTLA-307030	30G	ATA-100	Pass
IBM	DTLA-307020	20G	ATA-100	Pass
IBM	DTLA-307075	76.8 G	ATA-100	Pass
IBM	DDYS-T18350	18G	SCSI-3	Pass
Maxtor	91360D8 Ultra33	13G	ATA-33	Pass
Maxtor	86480D6 Ultra33	6.4G	ATA-33	Pass
Maxtor	91190D7 Ultra33	11G	ATA-33	Pass
Maxtor	91024U3	10G	ATA-66	Pass
Maxtor	82560A4 2.5G	2.5G	ATA-33	Pass
Maxtor	54098U8	40G	ATA-66	Pass
Maxtor	31536H2	15G	ATA-100	Pass
Maxtor	33073H4	30G	ATA-100	Pass
QUANTUM	AS40A0110-01-A	40 G	ATA-100	Pass
QUANTUM	BIGFOOT	4.0G	ATA-33	Pass
QUANTUM	EX3200AT	3.2G	ATA-33	Pass
QUANTUM	E5100AT	5.1G	ATA-33	Pass



QUANTUM	CR6400AT	6.4G	ATA-33	Pass
QUANTUM	CX6400AT	6.4G	ATA-33	Pass
QUANTUM	6.4G SCSI	6.4G	SCSI	Pass
QUANTUM	KA9100AT	9.1G	ATA-66	Pass
QUANTUM	KA13600AT	13G	ATA-66	Pass
QUANTUM	KX13600AT	13G	ATA-66	Pass
QUANTUM	LM15000AT	15G	ATA-66	Pass
QUANTUM	LM20500AT	20G	ATA-66	Pass
QUANTUM	AS30000AT	30G	ATA-100	Pass
QUANTUM	AS60000AT	60G	ATA-100	Pass
QUANTUM	GTLA-AS40A011	40G	ATA-100	Pass
SEAGATE	ST313032A	13G	ATA-100	Pass

Comments:

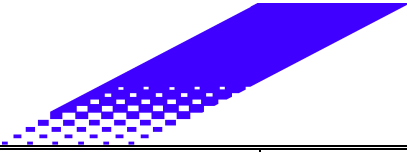
Joystick

Vendor	Model	Type	Result
Logitech	Wingman (Formula Force)	USB	Pass
Logitech	Wingman	USB	Pass
Logitech	Wingman extreme digital 3D	Game Port	Pass
Microsoft	Side Winder Feedback Pro	Game Port	Pass
Microsoft	Side Winder 3D Pro	Game Port	Pass
Microsoft	Side Winder Dual Strike	USB	Pass
Microsoft	Side Winder Joystick	USB	Pass
RockFire	QF-606U	USB	Pass
RockFire	QF-8800U	USB	Pass

Comments:

Keyboard

Vendor	Model	Type	Result
Microsoft	X03-51764	USB / PS/2	Pass
Microsoft	RT9401	USB / PS/2	Pass
BTC	8110M	USB	Pass
LEMEL	KB-5201P	USB	Pass
LEMEL	AK-208	USB	Pass
SAMPO	F-21YQ (SPK-2000)	USB	Pass
BTC	5126	PS2	Pass
BUS LOGIC	BA81C15	PS2	Pass
K.A.CHEN	KB-7000	PS/2	Pass



SAMPO	F-21BQ	PS/2	Pass
Logitech	Y-SA2	PS/2	Pass
ACER	6511-TA	PS/2	Pass
Logitech (IR)	Y-RA1	IR	Pass
WIRELESS	5110	IR	Pass

Comments:

LAN Card

Vendor	Model	Drivers	Type	Result
3COM	3C529B		PCI	Pass
3COM	3C509B-TX		PCI	Pass
3COM	3C905C-TX-M		PCI	Pass
3COM	3C359 Token Link XL		PCI	Pass
AMD	NE-PCI32		PCI	Pass
AMD	Pcnet-Home am79C978kc		PCI	Pass
ADMtek	AN983B		PCI	Pass
Digital	21041pa		PCI	Pass
DLINK	530TX		PCI	Pass
DLINK	DU-E10		USB	Pass
GFC	GFC2206		PCI	Pass
INTEL	SB82558B		PCI	Pass
INTEL	GD82559		PCI	Pass
INTEL	82550EY SERVER		PCI	Pass

Comments:

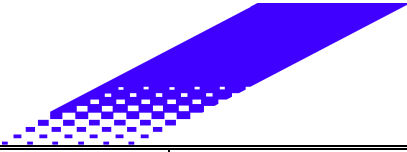
LAN HUB

Vendor	Model	Transfer Rate	Result
3COM 100/10	Switch office400	100/10	Pass
BUFFLO	LSW 10/100-8H	100/10	Pass
D-Link	DE-812TP+	10-Base	Pass
D-Link	DE-805TP	10-Base	Pass
D-Link	DE-809TC	10-Base	Pass

Comments:

Memory

Vendor	Model	Size	Type	Result
--------	-------	------	------	--------

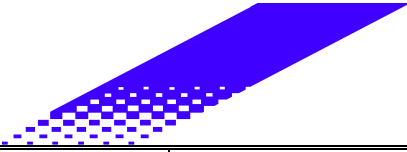


Buffalo	BSV884P4CO-4	128M	PC-133	Pass
Hitachi (Malaysia)	5264805FTT75	64M	PC-133	Pass
Hitachi (Malaysia)	5264805FTT75	128M	PC-133	Pass
HYUNDAI	GM72V66841ET75	64M	PC-133	Pass
HYUNDAI	GM72V66841ET75	128M	PC-133	Pass
IBM	N364804CT3C-75A	128M	PC-133	Pass
Infineon	HYB39S64800BT-7.5	64M	PC-133	Pass
Infineon	HYB39S128800CT-7.5	128M	PC-133	Pass
KINGMAX	KSV884T4A1A-07	128M	PC-133	Pass
KINGMAX	KSV884T4A1A-07	64M	PC-133	Pass
LGS	GM72V66841CT7J	64M	PC-100	Pass
MITSUMI	M2V64S300TP	128M	PC-133	Pass
MT	48LC8M8A2	64M	PC-100	Pass
MT	48LC8M8A2	128M	PC-100	Pass
MT	TLC16M8T-7	128M	PC-133	Pass
MOSEL	V54C365804VCT7	64M	PC-133	Pass
MOSEL	V54C365804VCT7	128M	PC-133	Pass
Nanya	NT56V6610C0T-75	128M	PC-133	Pass
Nanya	NT5SV32MBAT-7K	512M	PC-133	Pass
NEC (Singapore)	D4564841G5-A10-9JF	64M	PC-100	Pass
NEC (Singapore)	D4564841G5-A10-9JF	128M	PC-100	Pass
NEC (Japan)	D4564841G5-A75-9JF	128M	PC-133	Pass
NEC (Singapore)	D45128841G5-A75-9JF	256M	PC-133	Pass
SEC	KM48S8030CT-GL	64M	PC-100	Pass
SEC (Korea)	KM48S16030T-F10	256M	PC-100	Pass
Samsung	K4S560832A-TC75	512M	PC-133	Pass
SIMENS (USA)	HYB39S64800AT-7.5	64M	PC-133	Pass
SIMENS (USA)	HYB39S64800AT-7.5	128M	PC-133	Pass
Toshiba	TC59S6408BFT-80	64M	PC-100	Pass
Winbond (Taiwan)	W981216AH-75	64M	PC-133	Pass
Winbond (Taiwan)	W981208AH-75	128M	PC-133	Pass
Winbond	W981208AH-75	256M	PC-133	Pass
Kingston	ValueRAM/D168SP-75	256M	PC-133	Pass

Comments:

Modem Card

Vendor	Model	Drivers	Type	Result
AZTECH	MDP 3858SP-UE	vxd 2.1.2135.7.1	PCI	Pass
AZTECH	MDP 7800U	4.90.3000	PCI	Pass
3Com	U.S Robotics 0637	vxd v1.00.017	PCI	Pass
Lectron	I56PSP-T3	7.66-9K-03	PCI	Pass



3Com	U.S Robobit 56K FAX	V 5.3 NAM	COM	Pass
ADI	MDX-56KRE		COM	Pass
WELL	FM-56CNR-HPNA-RW-A		CNR	Pass
Lectron	PCT303W	2.40.0004	CNR	Pass
King stone	MTO6269353	vxd 5.00.83.8	CNR	Pass
D-LINK	CNR-LM	vxd v2.84	CNR	Pass
Rock	MODEM V.90	vxd v2.01	USB	Pass

Comments:

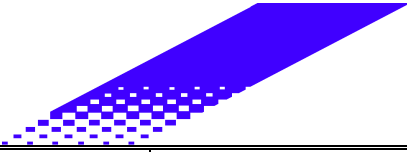
Mouse

Vendor	Model	Drivers	Type	Result
ARTEC	UM500P		PS/2	Pass
Logitech	M-BB48		USB	Pass
Logitech	M-BA47		USB	Pass
Logitech	M-S34		PS/2	Pass
Logitech	M-M30		PS/2	Pass
Logitech	M-S43		PS/2	Pass
Logitech	M-CAA43		PS/2	Pass
Logitech	M-CAB48A		PS/2	Pass
Logitech	M-MM35		Serial	Pass
Logitech	M-MM43		Serial	Pass
Logitech	M-RG45		IR	Pass
Microsoft	IntelliMouse X04-91790		USB/PS2	Pass
Microsoft	IntelliMouse B75-00006		USB/PS2	Pass
Seagate	IOWCM-B700		PS/2	Pass
WINIC	FDM-A50		USB	Pass

Comments:

Monitor

Vendor	Model	Size	Type	Result
GENUINE	G585	14"	CRT	Pass
ViewSonic	View Panel VPD150	15"	LCD	Pass
ViewSonic	E653	15"	CRT	Pass
SAMPO	AlphaScan 521a	15"	CRT	Pass
ViewSonic	View Panel VG175	17"	LCD	Pass
ViewSonic	17PS	17"	CRT	Pass
ViewSonic	17GA	17"	CRT	Pass
ViewSonic	GF775	17"	CRT	Pass



View Sonic	PS775	17"	CRT	Pass
View Sonic	E70	17"	CRT	Pass
PHILIPS	107MP	17"	CRT	Pass
SAMPO	AlphaScan 761	17"	CRT	Pass
SAMPO	AlphaScan 712 a	17"	CRT	Pass
SAMPO	AlphaScan 950	19"	CRT	Pass
OPTIQUEST	Q100	19"	CRT	Pass
View Sonic	E790	19"	CRT	Pass
View Sonic	E810	19"	CRT	Pass
HITACHI	SUPERSCAN 811	19"	CRT	Pass

Comments:

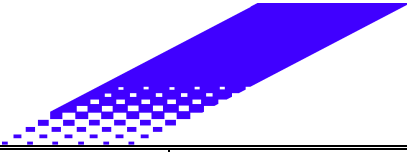
Power Supply

Vendor	Model	Type	Result
Enlight	HPC-250-101	ATX-250W	Pass
Enlight	HPS-300	ATX-300W	Pass
Enlight	ATX-725B	ATX-250W	Pass
iCute	LC-250ATX	ATX-250W	Pass
Seventeam	ST-250GL	ATX-250W	Pass
Seventeam	ST-275GL	ATX-275W	Pass
Seventeam	ST-301HR	ATX-300W	Pass
Seventeam	ST-350GL	ATX-350W	Pass
Seventeam	ST-400GL	ATX-400W	Pass
Seventeam	ST-300BLV	ATX-300W	Pass
DELTA	DPS-300KB	ATX-300W	Pass
HIPRO	HP-250NLXAK	ATX-250W	Pass
USPOWER	RP2-300A	ATX-300W	Pass
FSP	FSP400-60GN	ATX-400W	Pass
FSP	FSP300-60BT	ATX-300W	Pass
BELSON	BS-2000	ATX	Pass

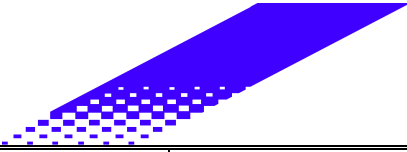
Comments:

Printer

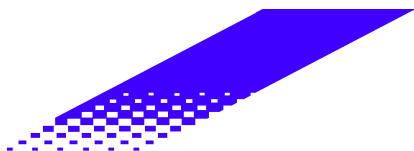
Vendor	Model	Drivers	Type	Result
CANON	BJ-80K	Ver 2.0	IR	Pass
EPSON	STYLUS PHOTO 750	2.00.2452	USB /LPT	Pass
HP	DeskJet 970Cxi	1.16.1.0	USB	Pass
HP	Deskjet 990 cxi	V13.0	IrDA/LPT/USB	Pass



HP	DeskJet 695C		LPT	Pass
Comments:				
Scanner				
Vendor	Model	Drivers	Type	Result
HP	Scan Jet 4200C	CD-Ver 2.01	USB	Pass
HP	Scan Jet 5200C	CD-Ver 2.00	USB	Pass
MUSTEK	1200USB	4.10.1998	USB	Pass
UMAX	Astra 1220U	CD-Ver 2.1		Pass
UMAX	Astra 2000U	CD-Ver 3.52u		Pass
Comments:				
SCSI Card				
Vendor	Model	Drivers	Type	Result
ADAPTEC	2940U		PCI	Pass
ADAPTEC	2940UW		PCI-WIDE	Pass
ADAPTEC	2940U2W (LVD)		PCI-WIDE	Pass
ADAPTEC	3940AUW		PCI-WIDE	Pass
ADAPTEC	29160		PCI SCSI3 LVD	Pass
AMD	AM53C974AKC		PCI-SCSI II	Pass
ASUS	PCI-SC875 REV:1.1		PCI	Pass
Bus Logic	PCI BT-930R		PCI	Pass
DOMEX	636UW		PCI	Pass
INITIO	INIC-950P		PCI	Pass
I-WILL	SIDE-2935UW		PCI	Pass
I-WILL	DU-280		PCI SCSI3 LVD	Pass
SYMBIOS	53C875		PCI	Pass
SYMBIOS	53C875E		PCI	Pass
Tekram	DC-390 5795		PCI	Pass
Tekram	DC-390U3W		PCI SCSI3 LVD	Pass
Comments:				
Sound Card				
Vendor	Model	Drivers	Type	Result
AVORTEX	AU8820B2	4.05.0110	PCI	Pass
CREATIVE	Sound Blaster CT4670	Ver 2.0	PCI	Pass

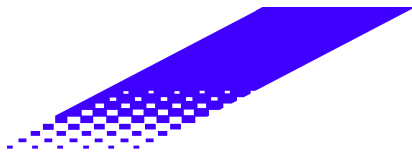


CREATIVE	Sound Blaster SB0060	Ver 2.4	PCI	Pass
CREATIVE	ES1371	4.05.1119	PCI	Pass
Ensoniq	ES1370	4.02.1033	PCI	Pass
Comments:				
USB HUB				
Vendor	Model	Drivers	Result	
KOUWEL	580H		Pass	
SIIG	UH-144		Pass	
PCI	UH-400		Pass	
D-Link	DU-H4		Pass	
Comments:				
ZIP/LS120				
Vendor	Model	Size	Type	Result
PANASONIC	JU-811T012	100M	IDE	Pass
Iomega	Z250ATAPI	250M	IDE	Pass
Iomega	Z100P	100M	LPT	Pass
Iomega	Z250P	250M	LPT	Pass
Iomega	ZIP 100 USB	100M	USB	Pass
Iomega	ZIP 250 USB	250M	USB	Pass
MATSUSHITA	LKM-F734-1 (LS-120)	120M	IDE	Pass
Comments:				



SOFTWARE COMPATIBILITY LIST

DOS	Version	Result
MS-DOS	6.22	Pass
IBM PC DOS	7.0	Pass
Windows	---	---
Windows98	Second Edition	Pass
Windows ME	4.90.3000	Pass
Windows NT Workstation	4.0	Pass
Windows 2000 Profession	Release	Pass
Windows 2000 Server	Release	Pass
Windows XP Home Edition	2002	Pass
Windows XP Professional	2002	Pass
Linux Red hat	7.1	Pass
Server	---	---
NetWare	4.12	Pass
NetWare	5.0	Pass
SCO Unix	5.0	Pass
Windows NT	4.0	Pass
Windows 2000	5.00.2195 (SP2)	Pass



VCORE WAVEFORM MEASUREMENT-Ver0.90

Finished Date: 90/08/06

VTI Tool for PGA370-3 on Com Port 1

AC Mode

Current Settings

Maximum Icc Setting

0 A 35 A

Minimum Icc Setting

0 A 30 A

Frequency

50 Hz 1k Hz 730k Hz

Clock Source ☒ Internal ☐ External

Resolution ☒ Presets ☐ Fine Adjust

Duty Cycle

10 % 50 % 90 %

Slew Rate

240 A/us 240 A/us 8 A/us

Change to

DC Mode

Stop

Exit

Probe Points + DP Config

About

22.5 Icc Max (A)

2.3 Icc Min (A)

1.76 Vcore (V)

1.55 Vtt (V)

1.54 Vtt_PWRGD Pullup Voltage (V)

0.04 Thermtrip# Pullup Voltage (V)

Thermtrip# Toggle

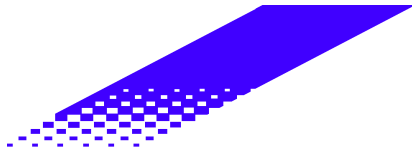
VID

1.70 Active

Set

CPU_1.70v setup

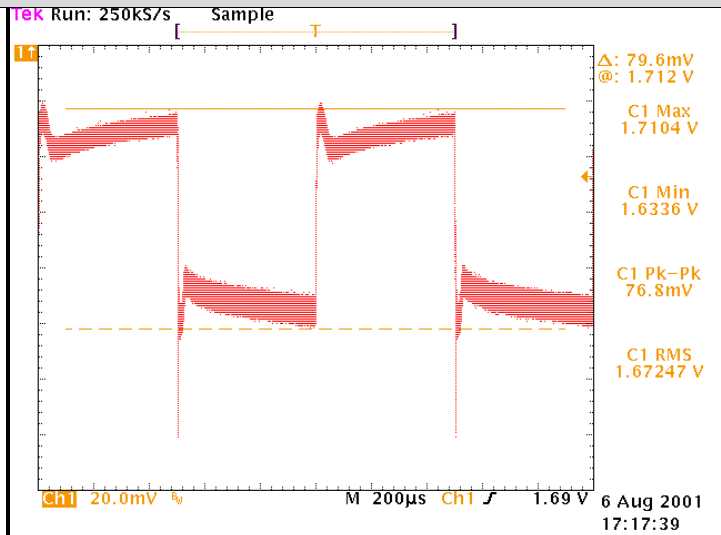
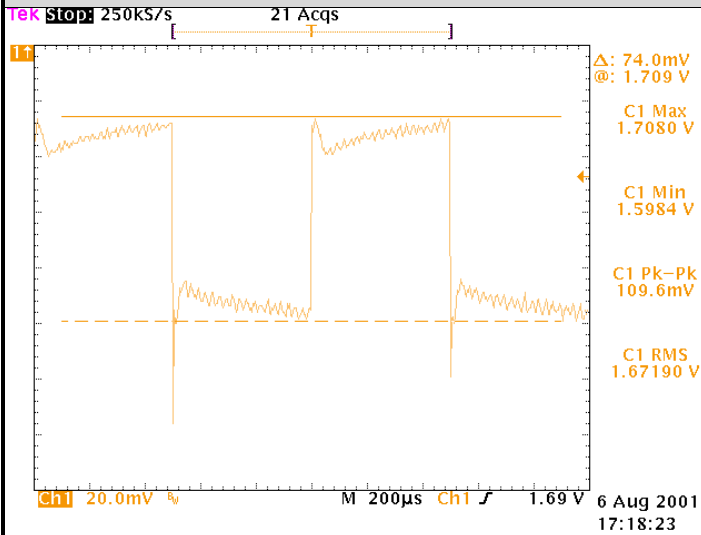
1. Select the RUN Button –changes to read “STOP” when operating.
2. Adjust the Toggle Frequency to the desired setting.
3. Adjust the Duty Cycle to the desired setting.
4. Adjust the Slew Rate to the desired setting.
5. Adjust the Icc Maximum Slider Bar while noting the Icc Max(A) Reading to obtain the desired Maximum Icc Load setting.



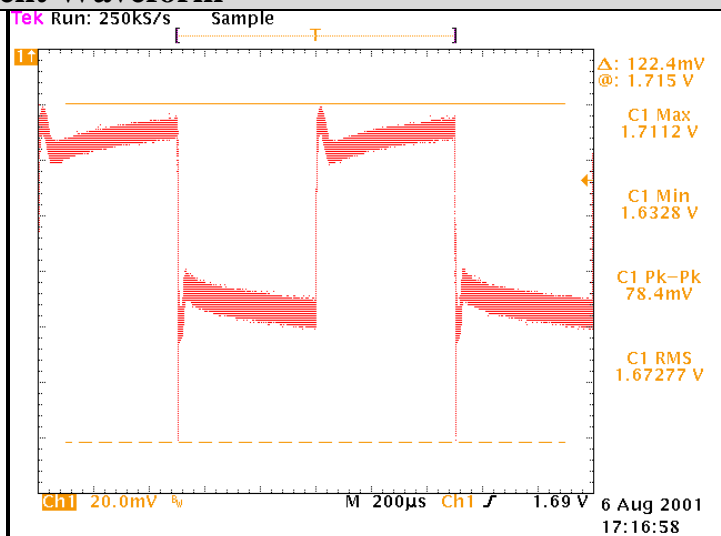
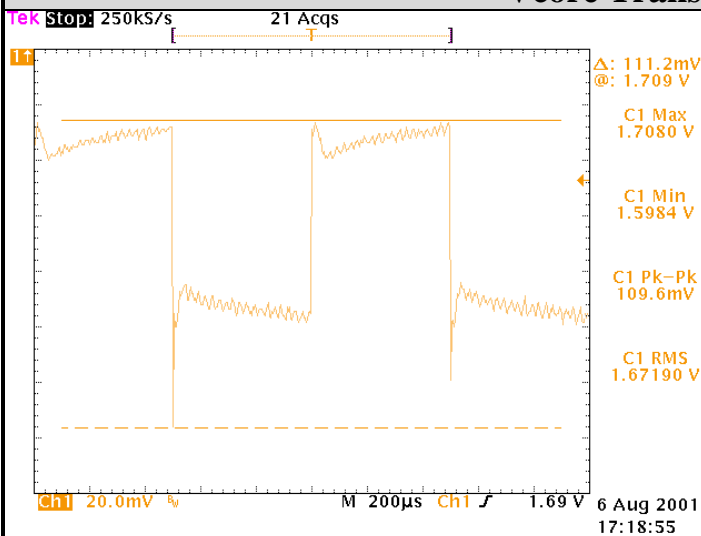
AK2 PIN Vcore1.7V

PASS

Vcore Static Waveform



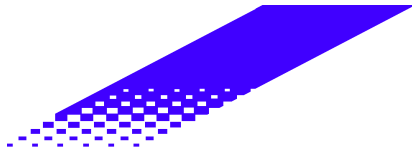
Vcore Transient Waveform



PS: 1. Transient and Static Waveform : VID setting : 1.7V , Icc :22A , Frequency : 2KHz

2.Static Test Range : +40mV~ -80mV

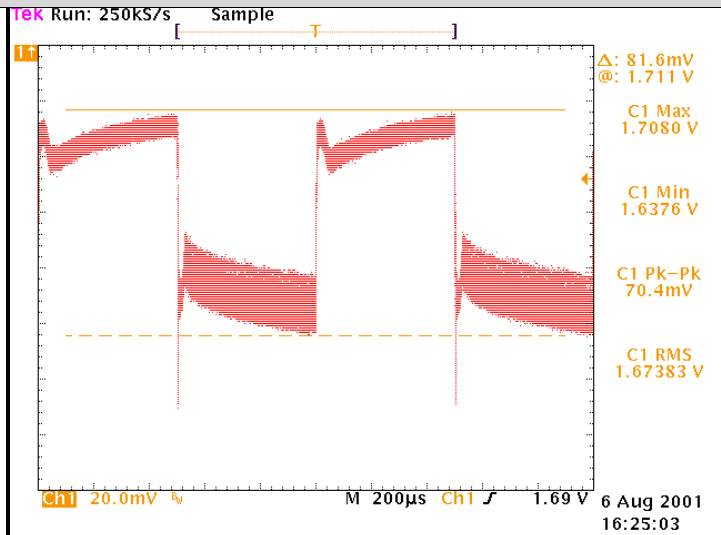
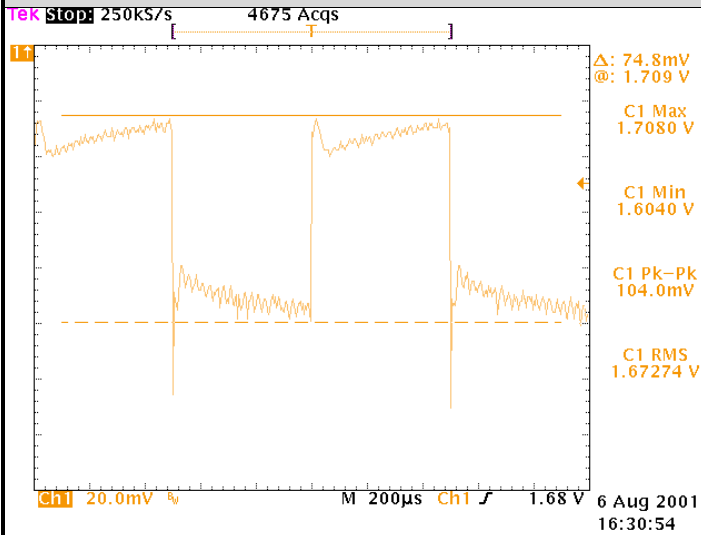
3.Transient Test Range : +80mV~ -110mV



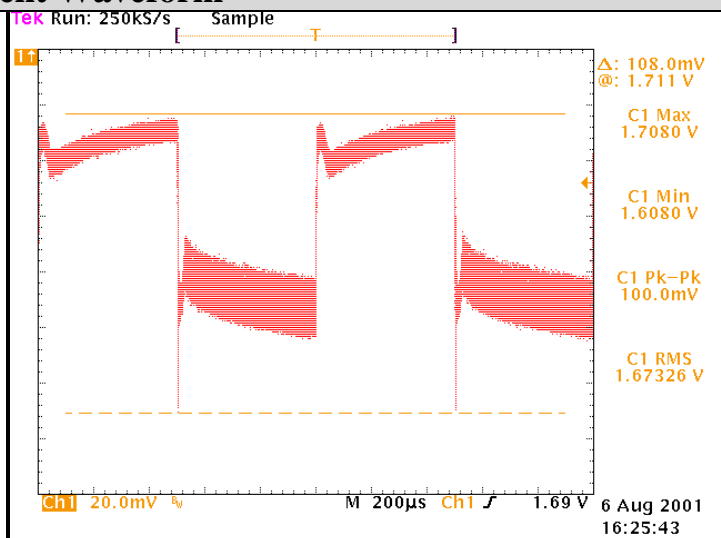
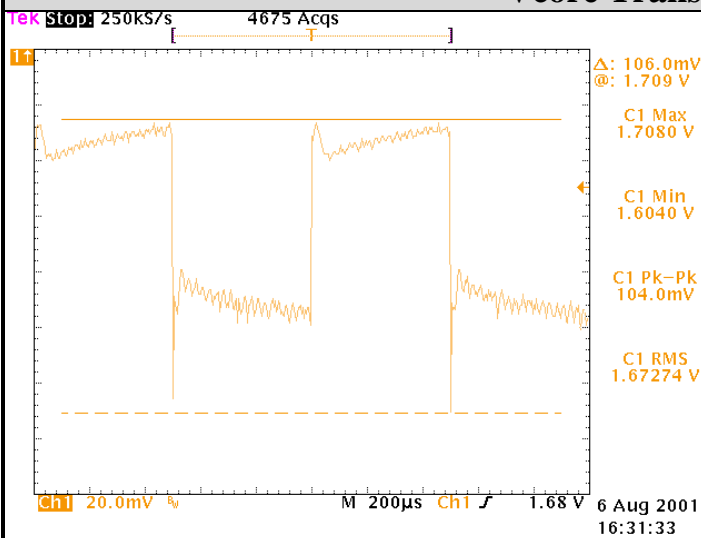
C3 PIN Vcore1.7V

PASS

Vcore Static Waveform



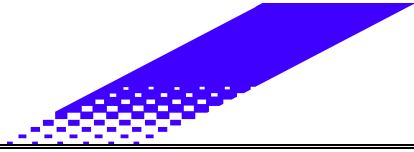
Vcore Transient Waveform



PS: 1. Transient and Static Waveform : VID setting : 1.7V , Icc :22A , Frequency : 2KHz

2.Static Test Range : +40mV~ -80mV

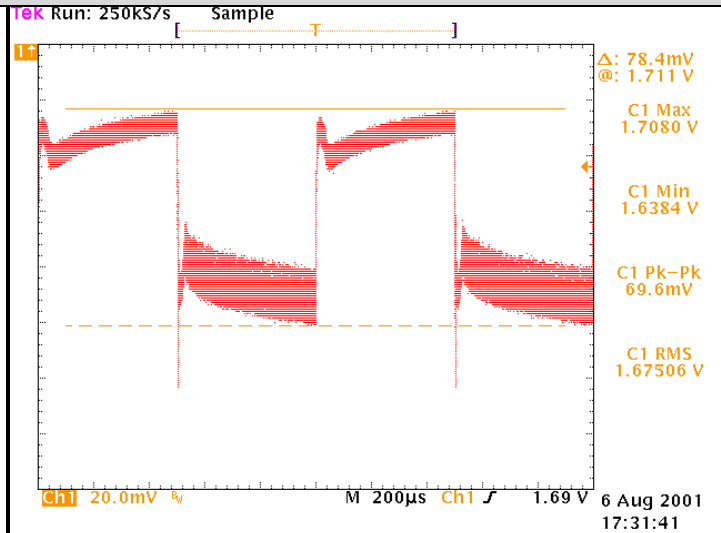
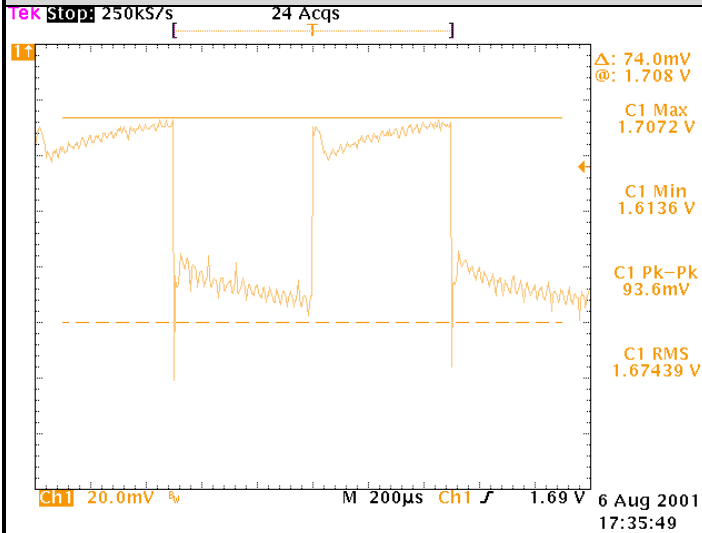
3.Transient Test Range : +80mV~ -110mV



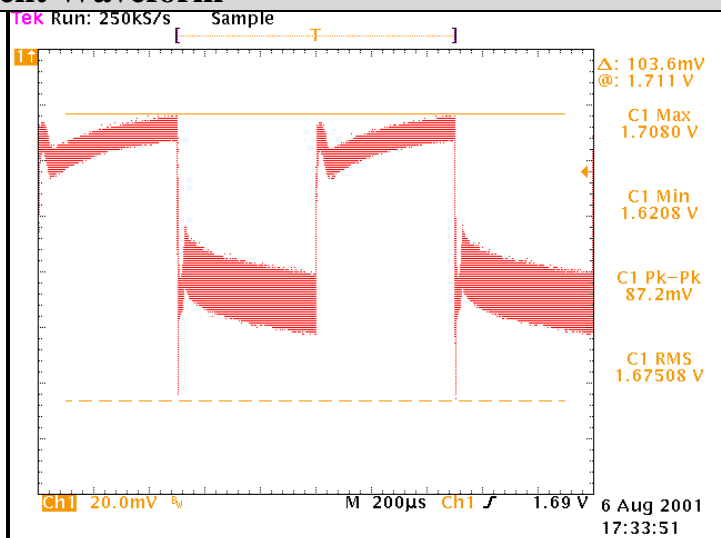
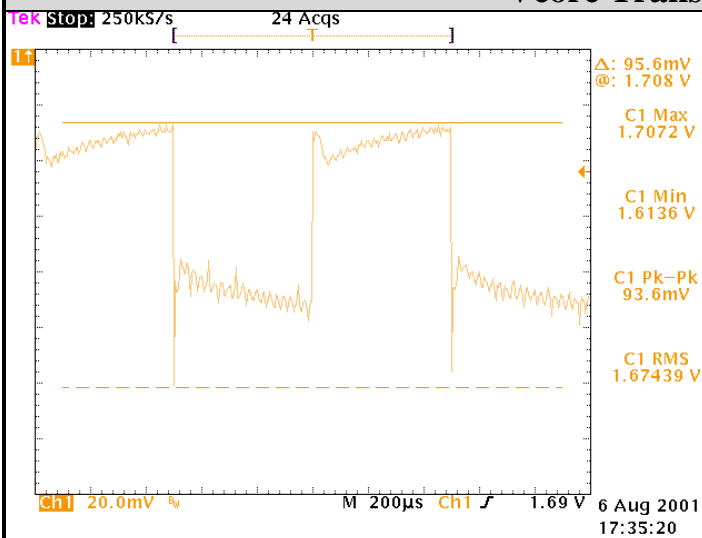
AK34 PIN Vcore1.7V

PASS

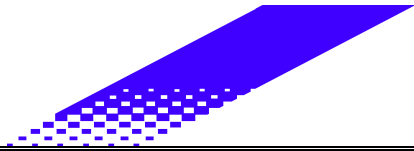
Vcore Static Waveform



Vcore Transient Waveform



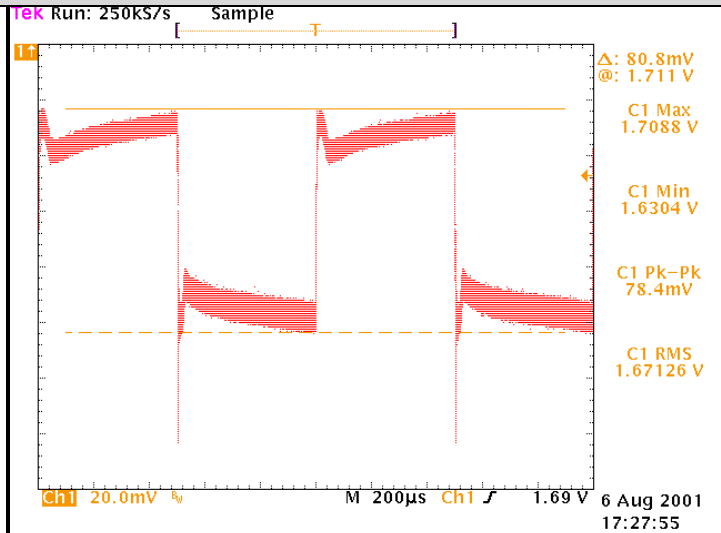
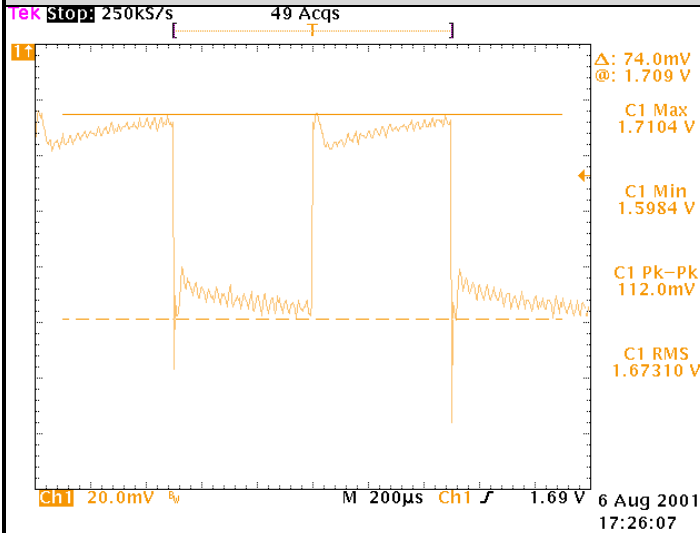
PS: 1. Transient and Static Waveform : VID setting : 1.7V , Icc :22A , Frequency : 2KHz
2.Static Test Range : +40mV~ -80mV
3.Transient Test Range : +80mV~ -110mV



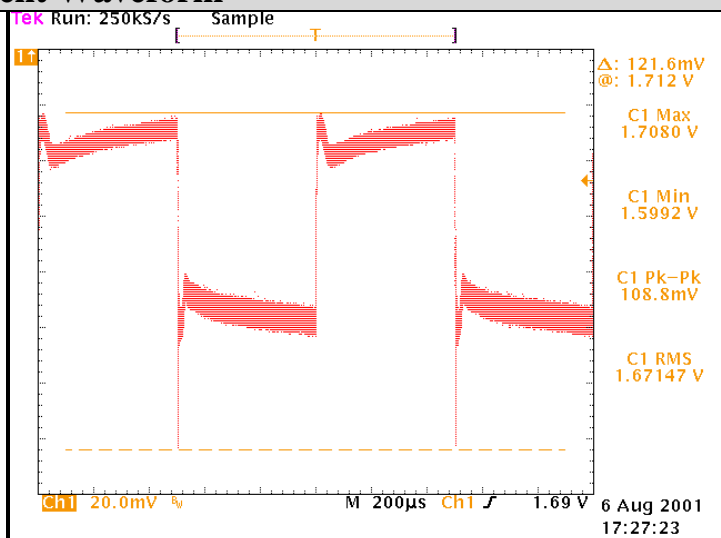
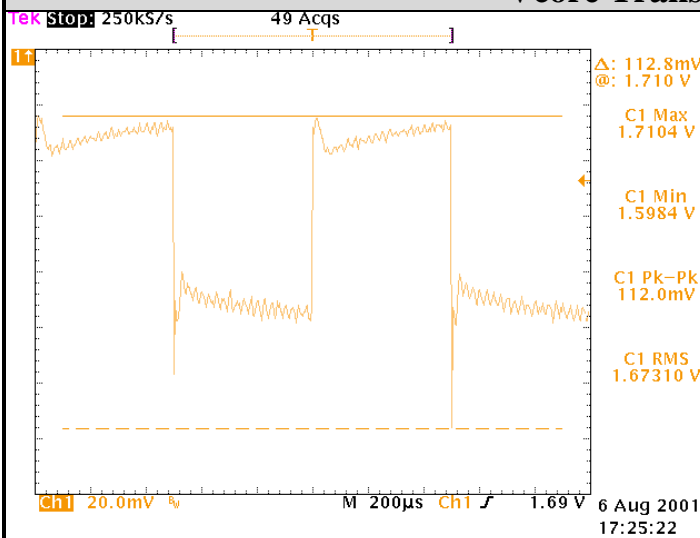
B34 PIN Vcore1.7V

PASS

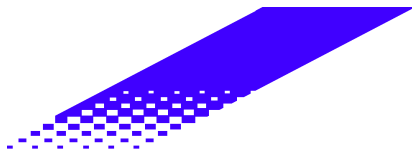
Vcore Static Waveform



Vcore Transient Waveform



PS: 1. Transient and Static Waveform : VID setting : 1.7V , Icc :22A , Frequency : 2KHz
2.Static Test Range : +40mV~ -80mV
3.Transient Test Range : +80mV~ -110mV



VCORE WAVEFORM MEASUREMENT-Ver1.0

Finished Date: 90/08/30

PGA370-2 VTT Tool on Port COM1

CURRENT SETTINGS		MEASUREMENTS		
Icc BIAS		Icc BIAS	Icc Load Step	Total Icc
		0.70 A	15.08 A	15.78 A
Icc Load Step		VID Setting	Processor Voltage	Total Power
		1.65	1.66 V	13.68 W

FREQUENCY

Frequency: 2 kHz

DUTY-CYCLE

Duty-Cycle 50

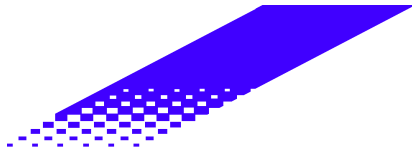
SLEW RATE

Slew Rate: 18.00 A/μS

☒ AC ☐ DC Version 2.7 OEM BETA

CPU_1.65v setup

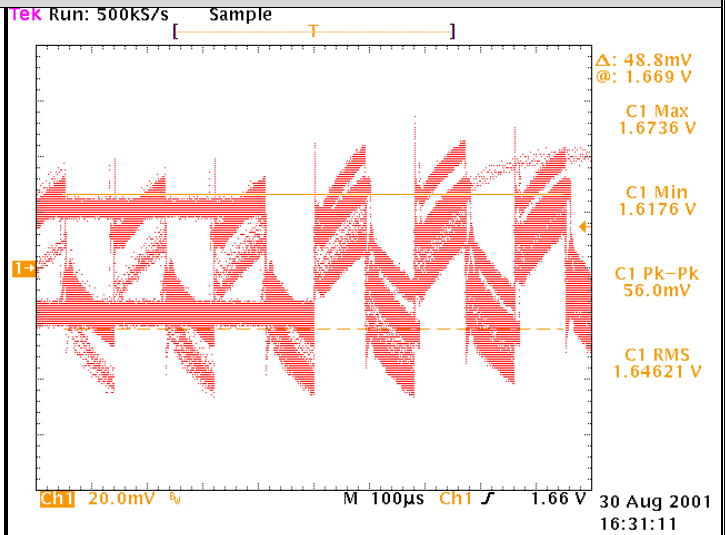
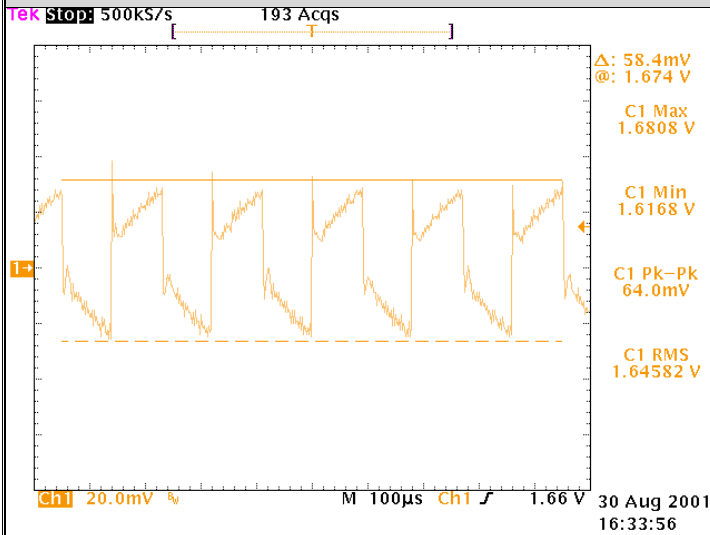
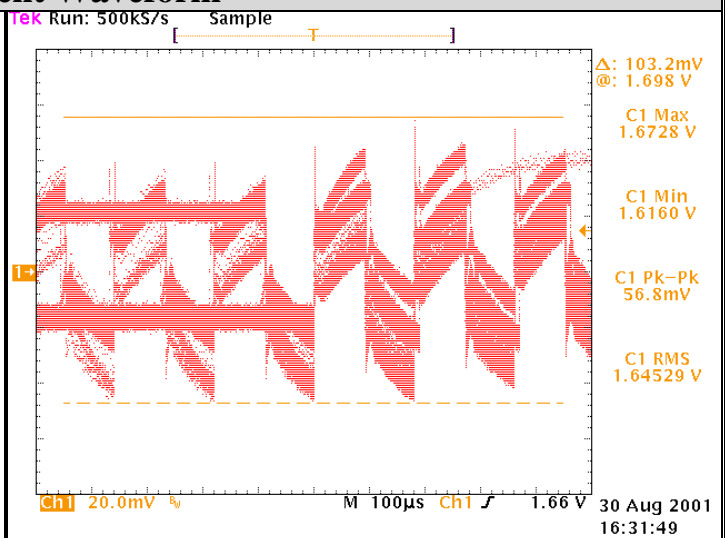
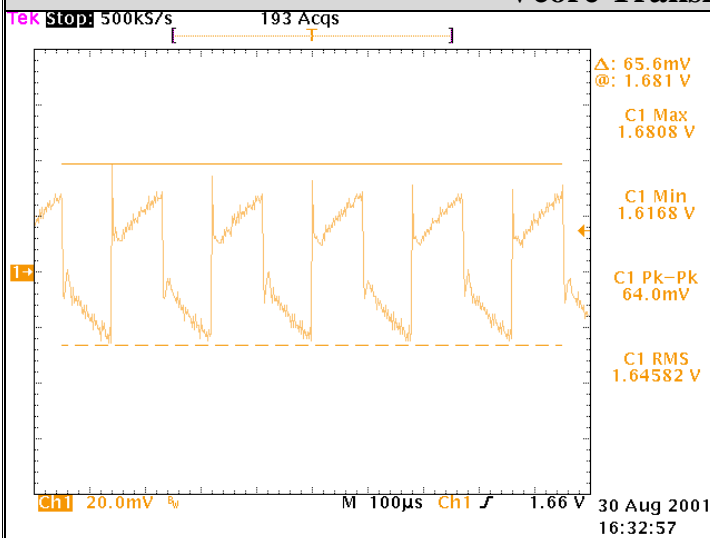
1. Select the RUN Button –changes to read “STOP” when operating.
2. Adjust the Toggle Frequency to the desired setting.
3. Adjust the Duty Cycle to the desired setting.
4. Adjust the Slew Rate to the desired setting.
5. Adjust the Icc Maximum Slider Bar while noting the Icc Max(A) Reading to obtain the desired Maximum Icc Load setting.



AK2 PIN Vcore1.65V

RESULT

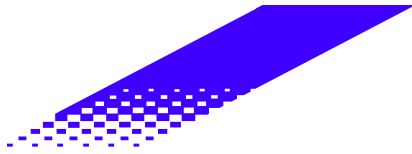
Pass

Vcore Static Waveform**Vcore Transient Waveform**

PS: 1. Transient and Static Waveform : VID setting : 1.65V , Icc :15.5A , Frequency : 2KHz

2. Static Test Range : +40mV~ -80mV

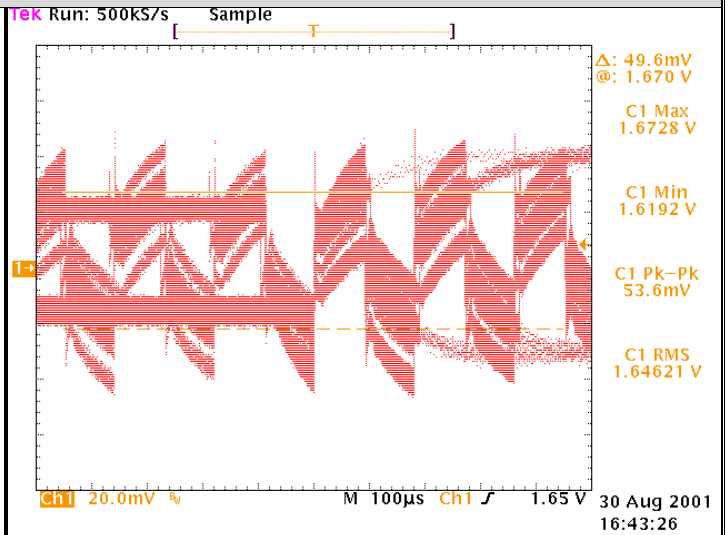
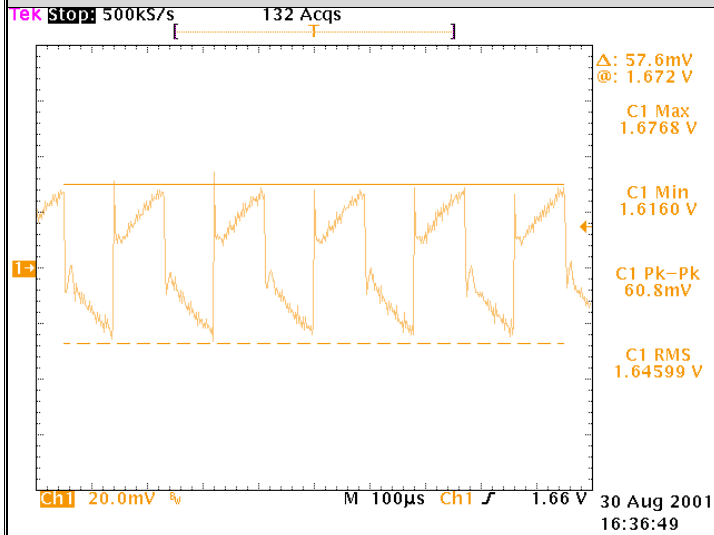
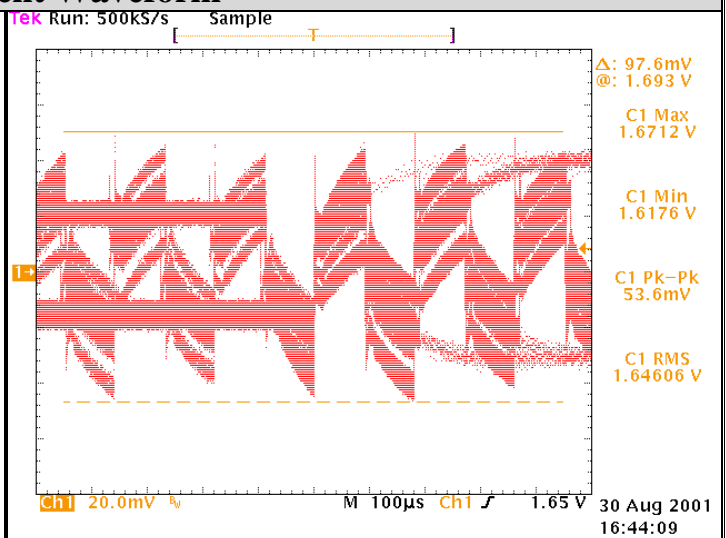
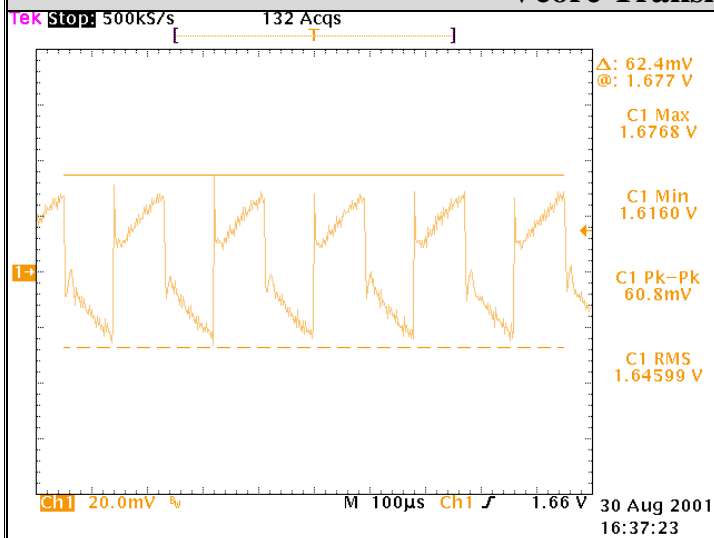
3. Transient Test Range : +80mV~ -130mV



C3 PIN Vcore1.65V

RESULT

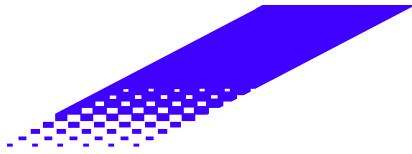
Pass

Vcore Static Waveform**Vcore Transient Waveform**

PS: 1. Transient and Static Waveform : VID setting : 1.65V , Icc :15.5A , Frequency : 2KHz

2.Static Test Range : +40mV~ -80mV

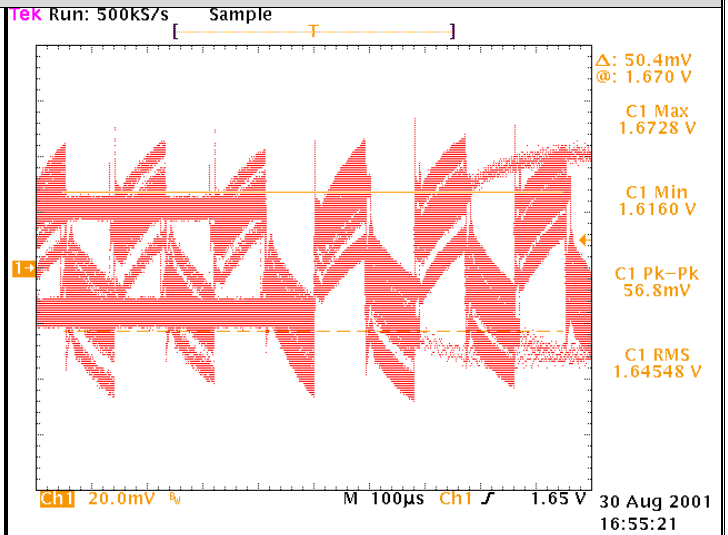
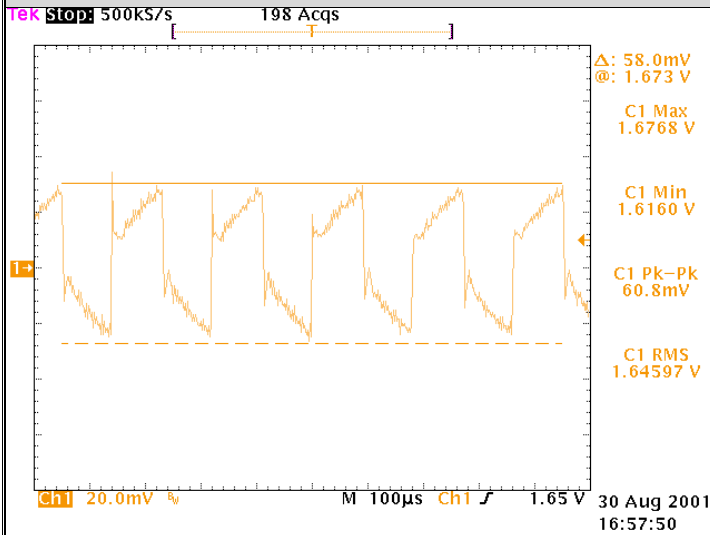
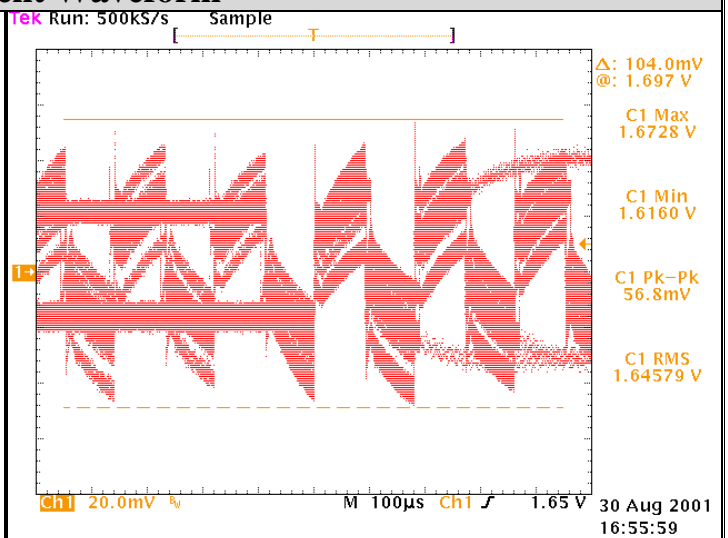
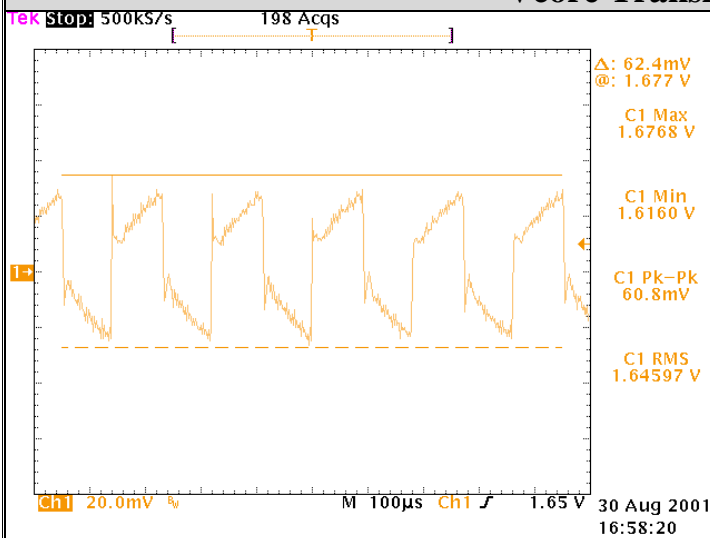
3.Transient Test Range : +80mV~ -130mV



AK34 PIN Vcore1.65V

RESULT

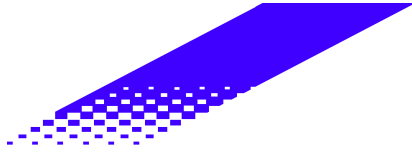
Pass

Vcore Static Waveform**Vcore Transient Waveform**

PS: 1. Transient and Static Waveform : VID setting : 1.65V , Icc :22A , Frequency : 2KHz

2.Static Test Range : +40mV~ -80mV

3.Transient Test Range : +80mV~ -130mV

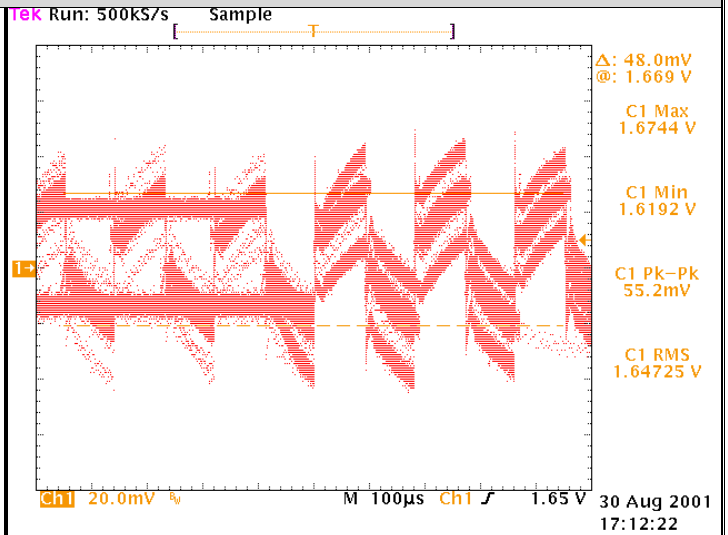
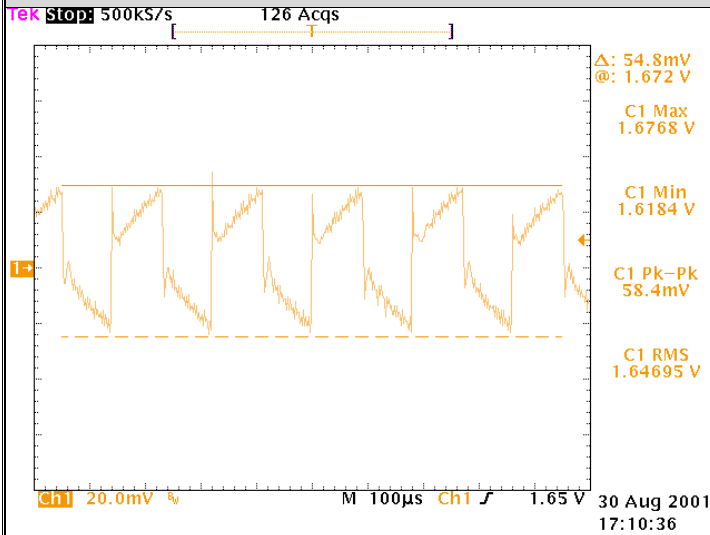


B34 PIN Vcore1.65V

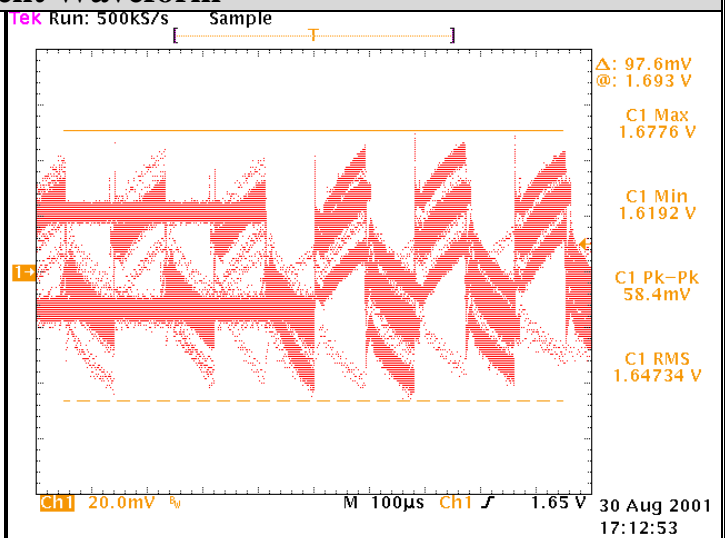
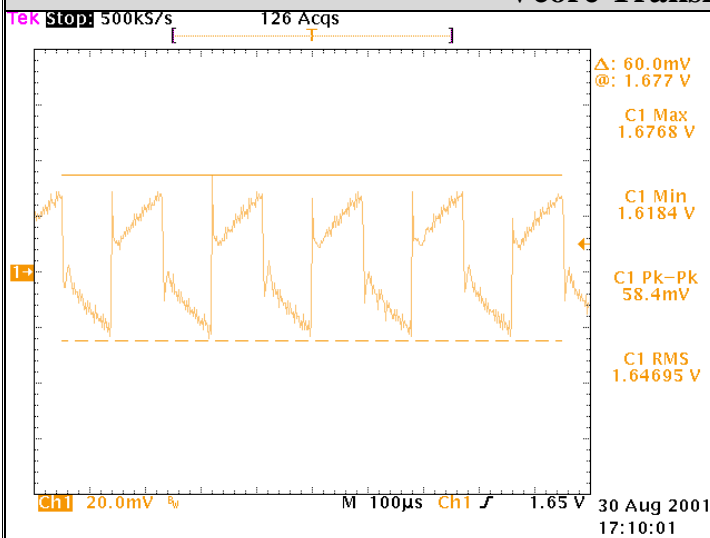
RESULT

Pass

Vcore Static Waveform



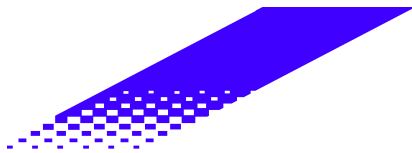
Vcore Transient Waveform



PS: 1. Transient and Static Waveform : VID setting : 1.65V , Icc :15.5A , Frequency : 2KHz

2.Static Test Range : +40mV~ -80mV

3.Transient Test Range : +80mV~ -130mV



Finished Date: 90/08/30

PGA370-2 VTT Tool on Port COM1

CURRENT SETTINGS		MEASUREMENTS		
Icc BIAS	Icc Load Step	Icc BIAS	Icc Load Step	Total Icc
0.00 A	10.00 A	0.73 A	21.40 A	22.13 A
Icc Load Step		VID Setting	Processor Voltage	Total Power
0.00 A ~26.50		1.70	1.64 V	18.74 W

FREQUENCY

2 kHz 32.9 kHz

Frequency: 5.5 kHz

DUTY-CYCLE

30% 70%

Duty-Cycle 50

SLEW RATE

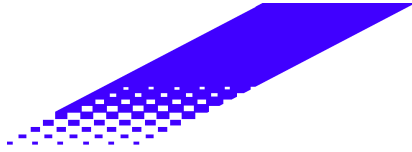
Slowest Fastest

Slew Rate: 20.38 A/μS

STOP RUN ☒ AC ☐ DC Version 2.7 OEM BETA EXIT

CPU_1.70v setup

1. Select the RUN Button –changes to read “STOP” when operating.
2. Adjust the Toggle Frequency to the desired setting.
3. Adjust the Duty Cycle to the desired setting.
4. Adjust the Slew Rate to the desired setting.
5. Adjust the Icc Maximum Slider Bar while noting the Icc Max(A) Reading to obtain the desired Maximum Icc Load setting.

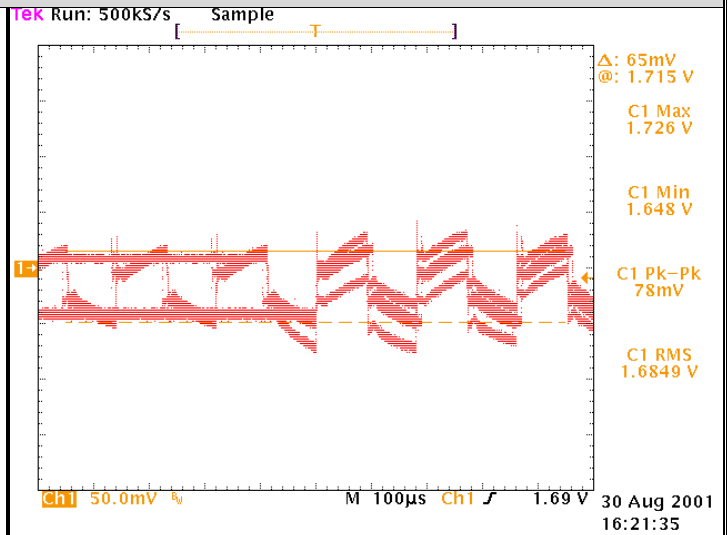
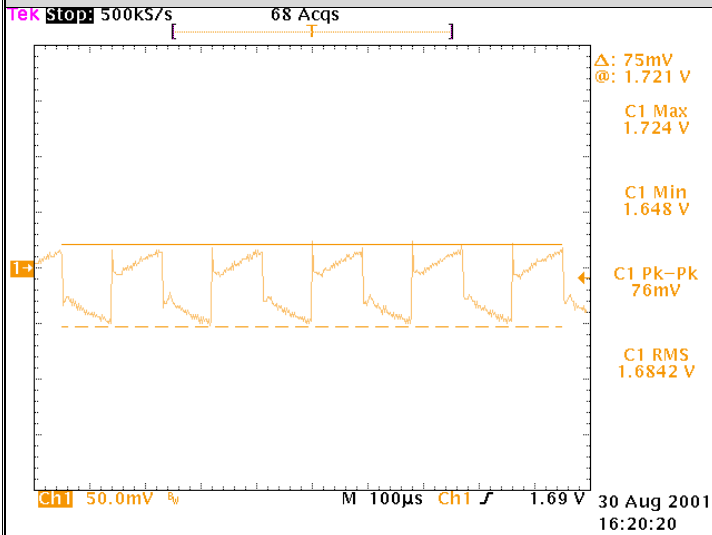


AK2 PIN Vcore1.7V

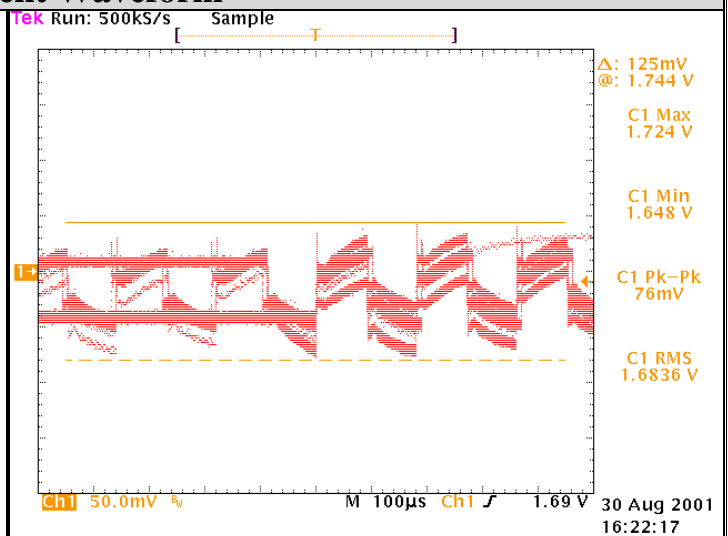
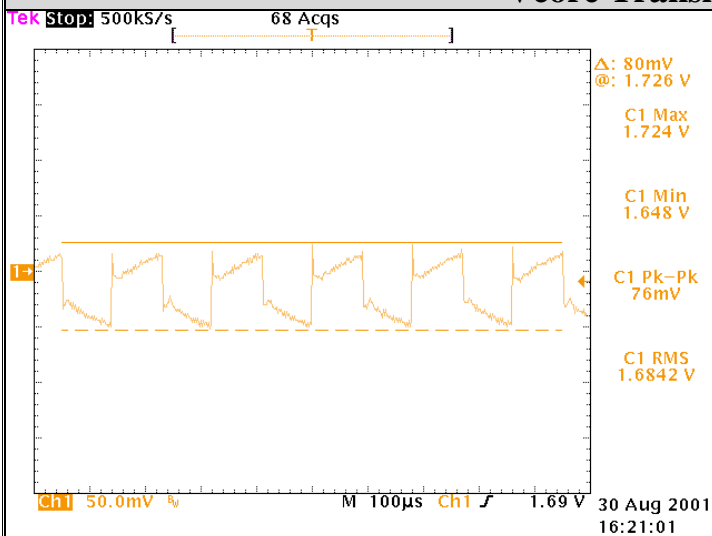
RESULT

Pass

Vcore Static Waveform



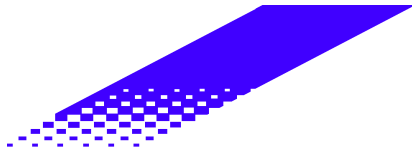
Vcore Transient Waveform



PS: 1. Transient and Static Waveform : VID setting : 1.7V , Icc :22A , Frequency : 2KHz

2.Static Test Range : +40mV~ -80mV

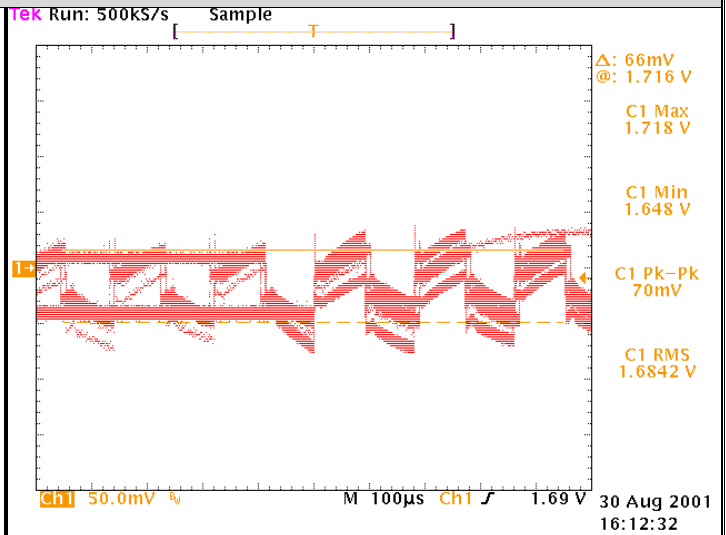
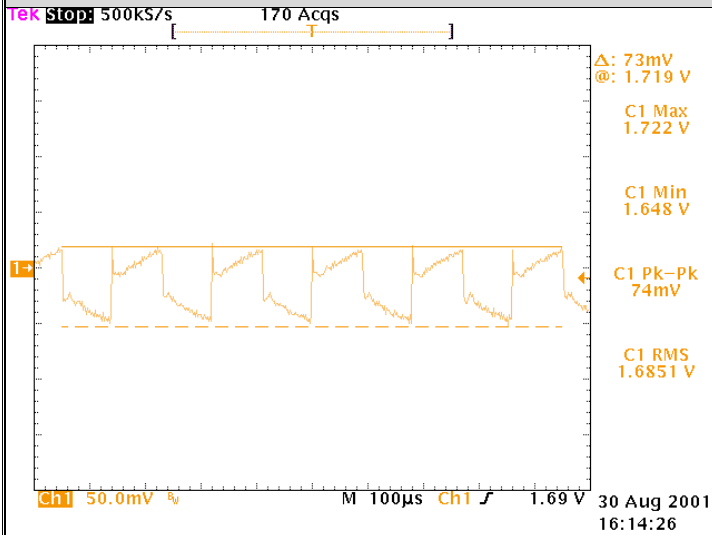
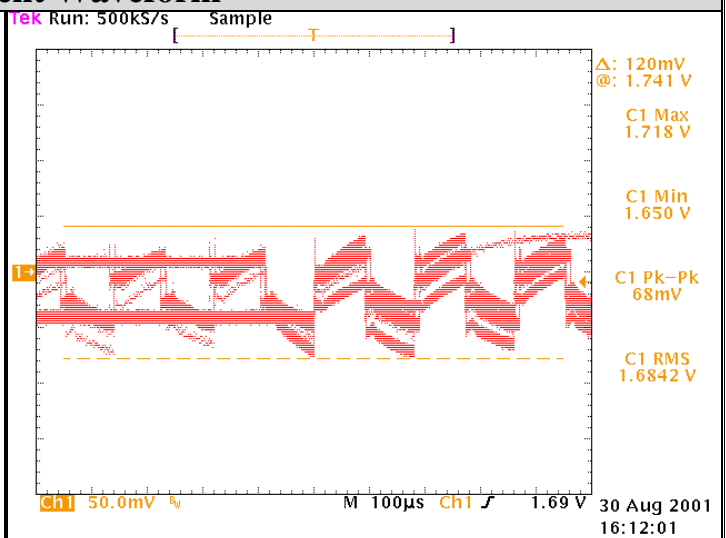
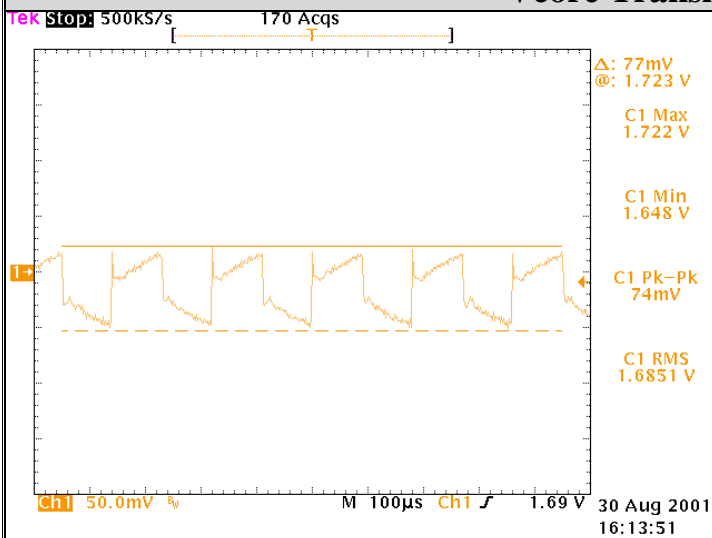
3.Transient Test Range : +80mV~ -110mV



C3 PIN Vcore1.7V

RESULT

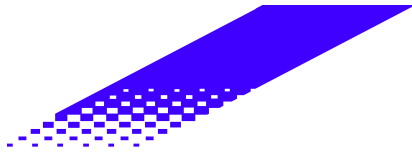
Pass

Vcore Static Waveform**Vcore Transient Waveform**

PS: 1. Transient and Static Waveform : VID setting : 1.7V , Icc :22A , Frequency : 2KHz

2.Static Test Range : +40mV~ -80mV

3.Transient Test Range : +80mV~ -110mV

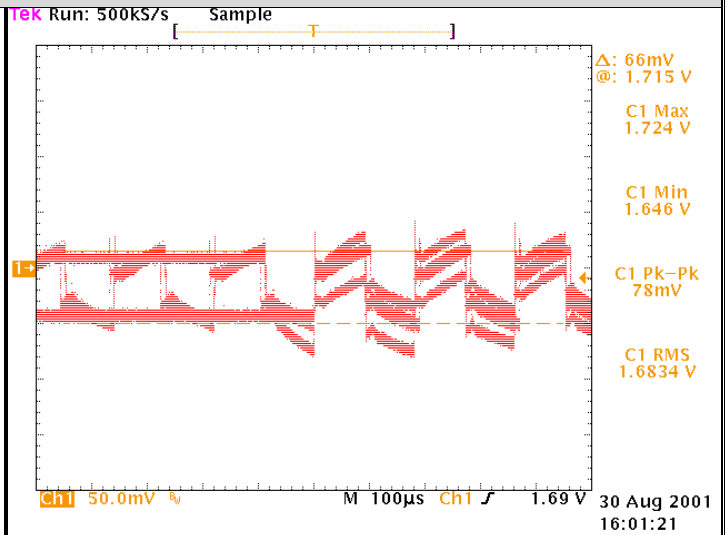
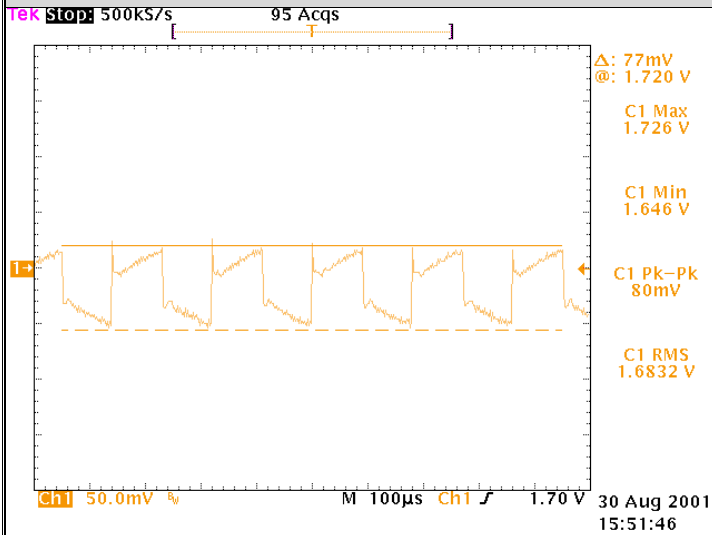


AK34 PIN Vcore1.7V

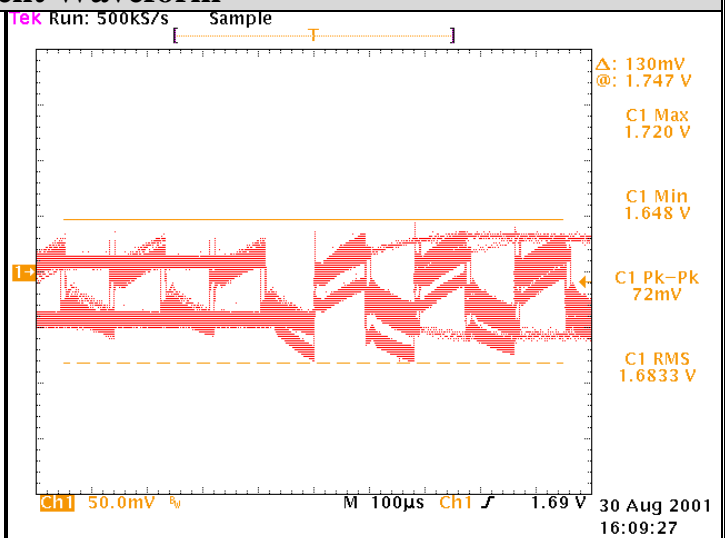
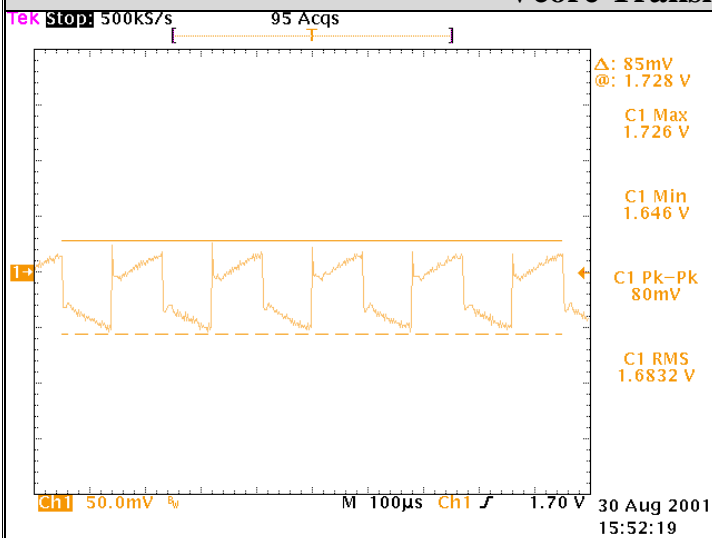
RESULT

Pass

Vcore Static Waveform



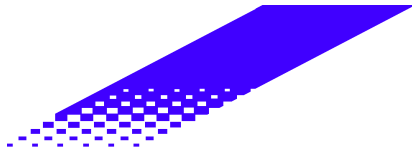
Vcore Transient Waveform



PS: 1. Transient and Static Waveform : VID setting : 1.7V , Icc :22A , Frequency : 2KHz

2.Static Test Range : +40mV~ -80mV

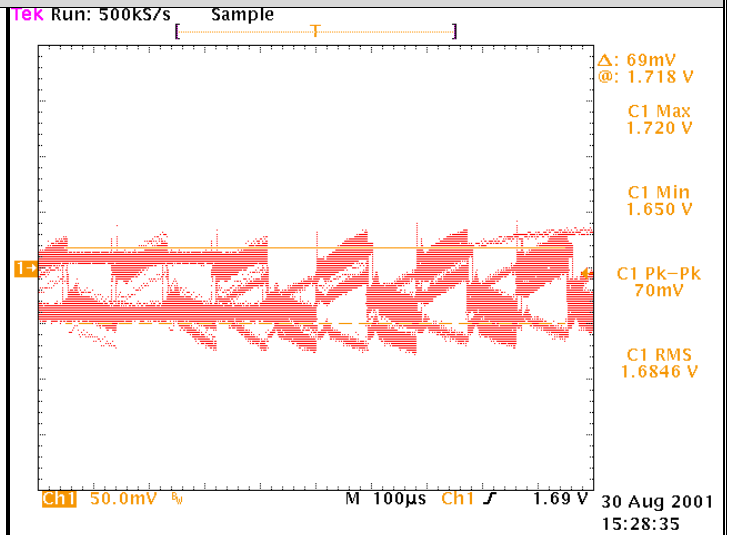
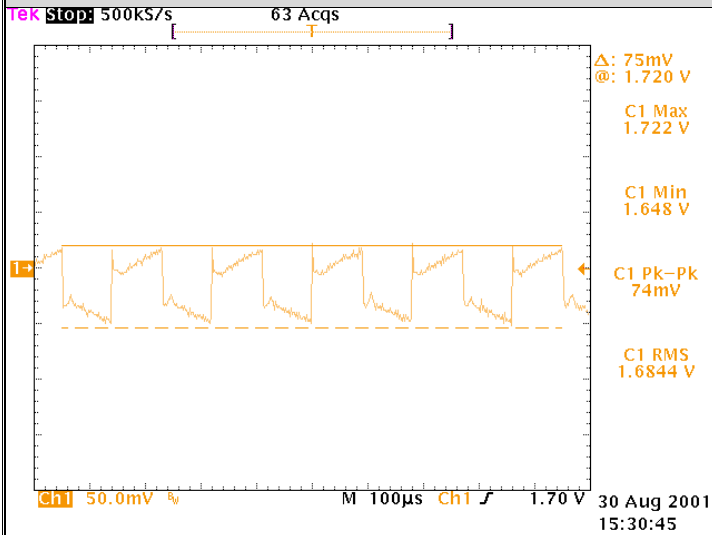
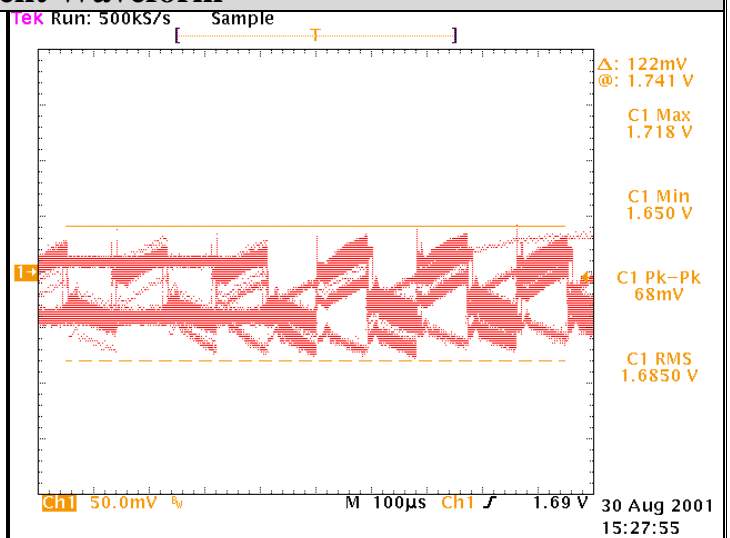
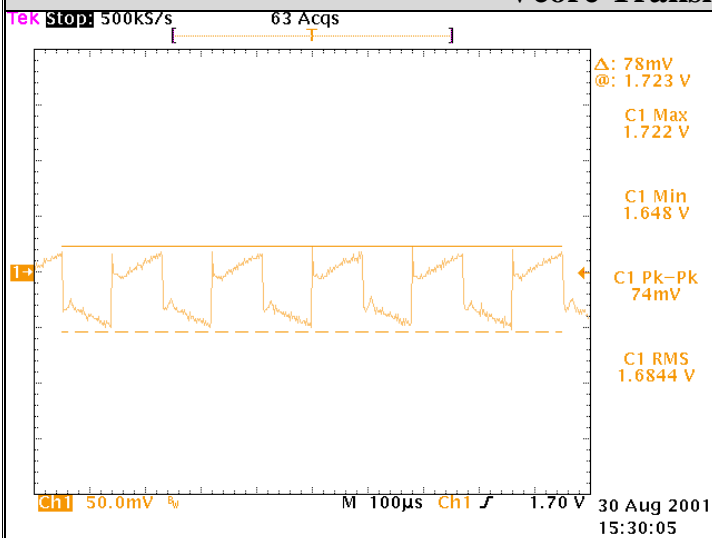
3.Transient Test Range : +80mV~ -110mV



B34 PIN Vcore1.7V

RESULT

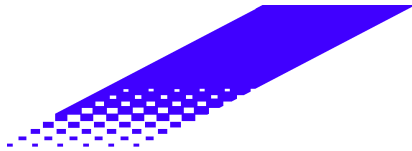
Pass

Vcore Static Waveform**Vcore Transient Waveform**

PS: 1. Transient and Static Waveform : VID setting : 1.7V , Icc :22A , Frequency : 2KHz

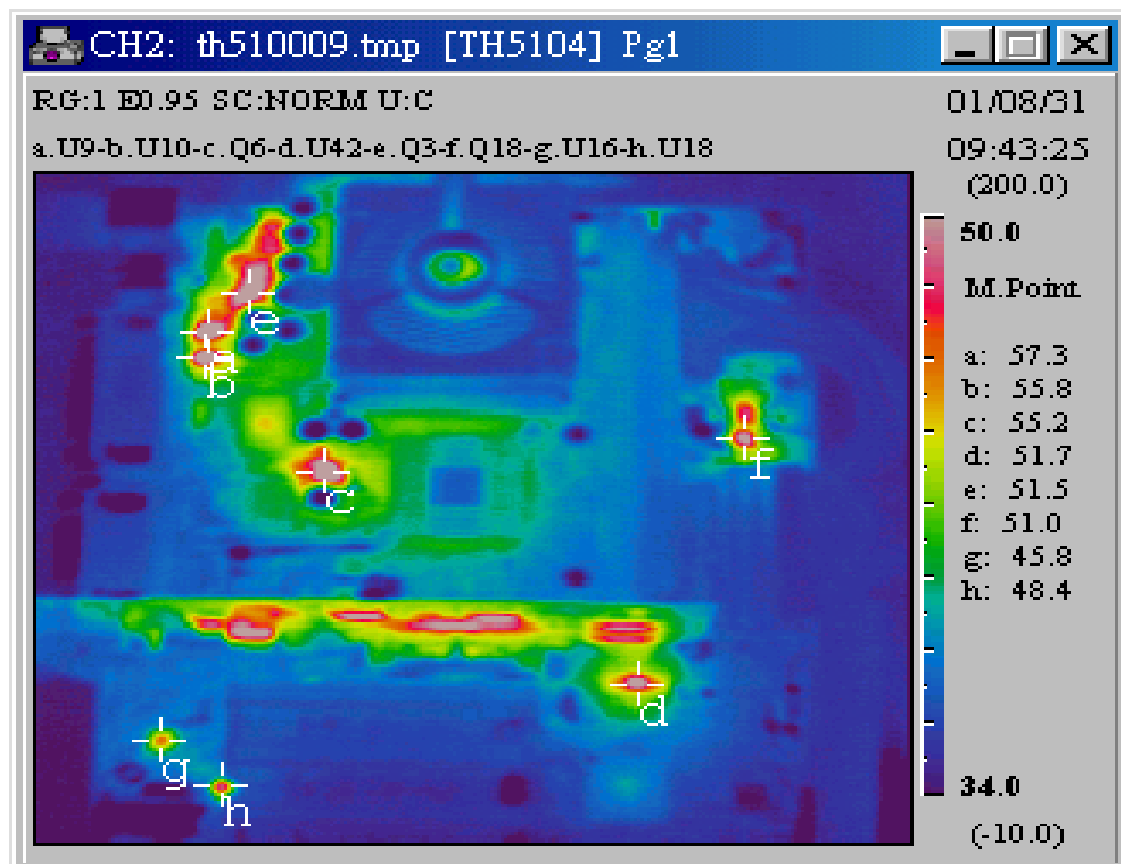
2.Static Test Range : +40mV~ -80mV

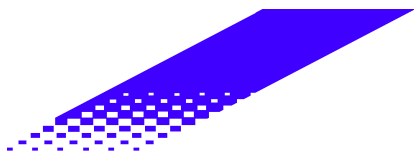
3.Transient Test Range : +80mV~ -110mV



THERMAL IMAGE TEST – Ver 1.0

Motherboard General Information	
Vendor	Biostar
Model Number	M6TSU
Revision	1.0
Temperature (°C)	35 °C
Humidity rate (%)	0 ~ 60 %
Thermo Tracer	NEC TH5104
Test Program	3Dmark2000
Comments: The component temperature measured value was based on 35°C check in the chamber and the system during in the 3Dmark2000 Looping testing.	





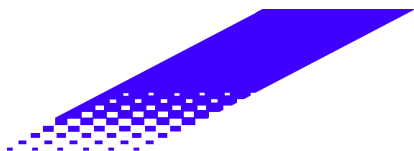
FOUR CORNER TEST-Ver0.9

Test Equipment & Environment			
M/B TYPE	Tsu/0.9	CPU Level	PIII 1.0GHz
RAM TYPE	Winbond 128M pc133 x3	VGA TYPE	ELSA GEFORCE2 ULTRA
Power Supply	FP ISR0007091	Floppy	PANASONIC JU-257
IDE1 Primary	QUANTUM CX6400AT	IDE1 Secondary	SEAGATE ST34321A
IDE2 Primary	PIONEER DVD ROM	IDE2 Secondary	IOMEGA ZIP250
PCI 1	AHA 29160	PCI 2	AHA 2940U2W
PCI 3	3com 3c905c	PCI 4	3com 3c905
PCI 5	Creative live	PCI 6	3com modem card
O.S. Version	WINDOWS ME	BIOS Version	Tsu0817f
BCM Version	2.01	Driver CD Ver.	I116 1B

BCM Stress Test (30 min.)									
Normal (Standard Power Voltage & Room Temperature)									
Audio	Processor	Video	CD-ROM	DOS	Disk	Floppy	Graphics	Memory	WinApp
PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
Corner 1 : 45°C & 3.13V									
Audio	Processor	Video	CD-ROM	DOS	Disk	Floppy	Graphics	Memory	WinApp
PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
Corner 2 : 45°C & 3.46V									
Audio	Processor	Video	CD-ROM	DOS	Disk	Floppy	Graphics	Memory	WinApp
PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
Corner 3 : 10°C & 3.13V									
Audio	Processor	Video	CD-ROM	DOS	Disk	Floppy	Graphics	Memory	WinApp
PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
Corner 4 : 10°C & 3.46V									
Audio	Processor	Video	CD-ROM	DOS	Disk	Floppy	Graphics	Memory	WinApp
PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS

V_{CORE} OCP & OVP TEST

Test Environment							
M/B		TSU		Power Supply		ST-400	
VID Setting		1.70V		PWM		INTERSIL ISL6524	
Electronic Loading		Chroma 63030		Engineer Signature		K.E.Y.	
O.C.P test	35A	Pass/Fail	Pass	O.V.P test	2.06	Pass/Fail	Pass



FOUR CORNER TEST-Ver1.0

Test Equipment & Environment			
M/B TYPE	Tsu/1.0	CPU Level	PIII Tualatin 1.2GHz
RAM TYPE	Winbond 128M pc133 x3	VGA TYPE	ELSA GEFORCE2 ULTRA
Power Supply	FP ISR0007091	Floppy	PANASONIC JU-257
IDE1 Primary	QUANTUM CX6400AT	IDE1 Secondary	SEAGATE ST34321A
IDE2 Primary	PIONEER DVD ROM	IDE2 Secondary	IOMEGA ZIP250
PCI 1	AHA 29160	PCI 2	AHA 2940U2W
PCI 3	3com 3c905c	PCI 4	3com 3c905
PCI 5	Creative live	PCI 6	3com modem card
O.S. Version	WINDOWS ME	BIOS Version	Tsu0828f
BCM Version	2.01	Driver CD Ver.	I118 1B

BCM Stress Test (30 min.)									
Normal (Standard Power Voltage & Room Temperature)									
Audio	Processor	Video	CD-ROM	DOS	Disk	Floppy	Graphics	Memory	WinApp
PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
Corner 1 : 45°C & 3.13V									
Audio	Processor	Video	CD-ROM	DOS	Disk	Floppy	Graphics	Memory	WinApp
PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
Corner 2 : 45°C & 3.46V									
Audio	Processor	Video	CD-ROM	DOS	Disk	Floppy	Graphics	Memory	WinApp
PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
Corner 3 : 10°C & 3.13V									
Audio	Processor	Video	CD-ROM	DOS	Disk	Floppy	Graphics	Memory	WinApp
PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
Corner 4 : 10°C & 3.46V									
Audio	Processor	Video	CD-ROM	DOS	Disk	Floppy	Graphics	Memory	WinApp
PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS

V_{CORE} OCP & OVP TEST

Test Environment							
M/B		TSU		Power Supply		ST-400	
VID Setting		1.70V		PWM		INTERSIL ISL6524	
Electronic Loading		Chroma 63030		Engineer Signature		K.E.Y.	
O.C.P test	35A	Pass/Fail	Pass	O.V.P test	2.06	Pass/Fail	Pass